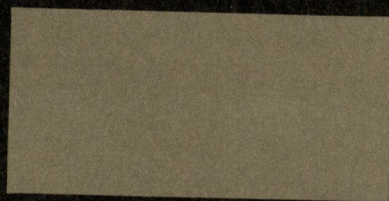


CALIFORNIA STATE COLLEGE

AT FULLERTON
(formerly Orange State)

CATALOG

1964|65



General Catalog

and

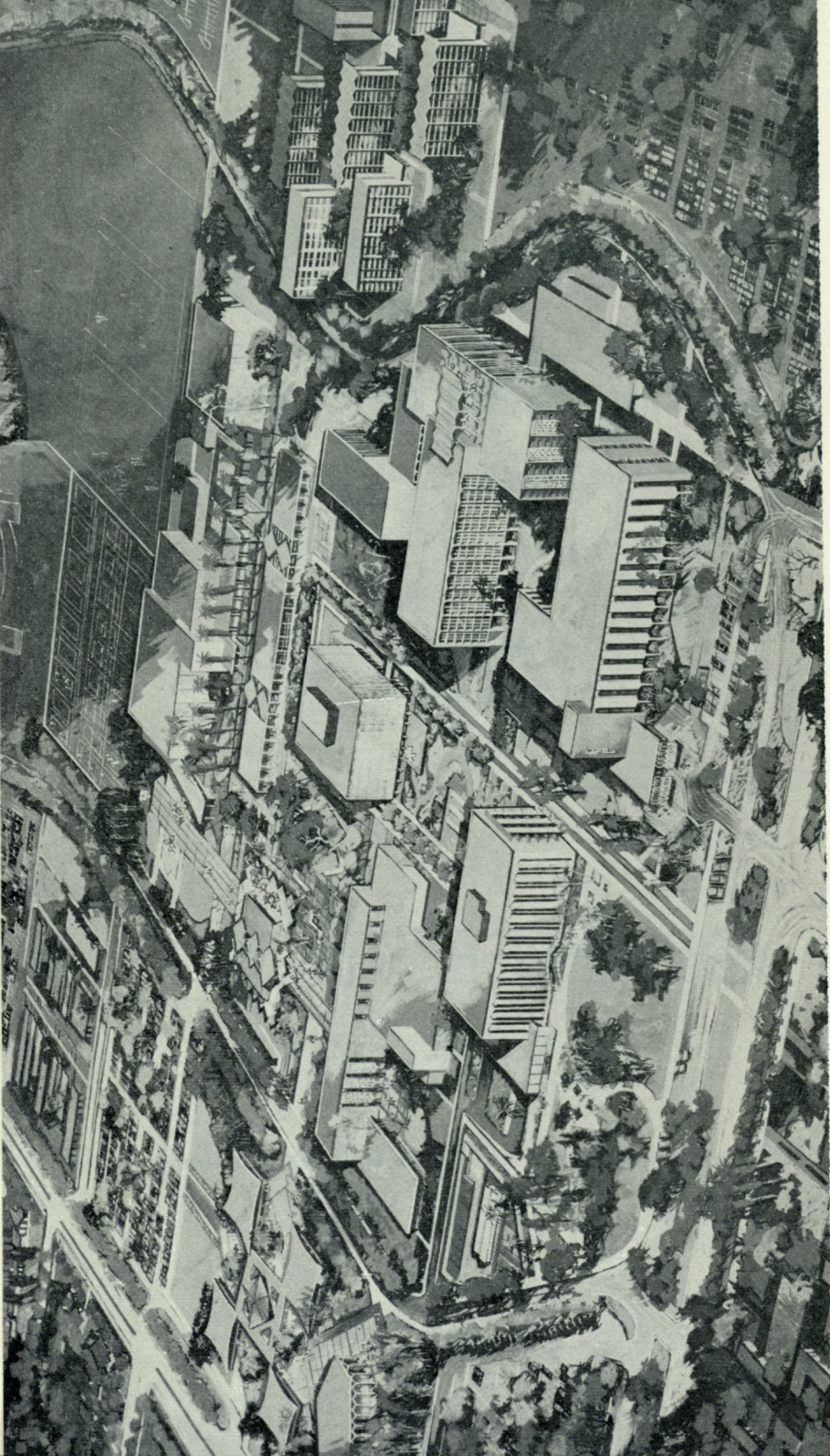
ANNOUNCEMENT OF COURSES

1964-1965



ORANGE STATE COLLEGE

800 North State College Boulevard, Fullerton, California



The future campus of Orange State College as it will look in approximately 1975-1980.

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COLLEGE CALENDAR

1964-65

SUMMER SESSION 1964

June 15, Mon.	First Summer Session begins
July 24, Sat.	First Summer Session ends
August 27, Mon.	Second Summer Session begins
September 21, Fri.	Second Summer Session ends

FALL SESSION 1964

August 11, Sat.	Undergraduate student applications for admission due in Admissions Office
September 9, Wed.	Graduate student applications for admission due in Admissions Office
September 14, Mon.	Faculty Orientation
September 15, 16, 17, Tues., Wed., Thurs.	Advisement, Registration, and Freshman Orientation
September 17, Thurs.	Last day to register without late registration fee
September 21, Mon.	Classes begin
September 21, Fri.	Last day to register or add classes
October 21, Fri.	Applying deadline for candidates for graduation, Spring and Summer 1965
October 30, Fri.	Last day to drop a course with automatic "W"

ORGANIZATION AND ADMINISTRATION

November 11, Wed.	Senior graduation
November 26, 27, Thurs., Fri.	
December 21, Mon.	
January 4, Mon.	
January 21, Thurs.	
January 22, Fri.	
January 25-26, Mon.-Thurs.	
January 15, Fri.	Undergraduate and graduate student applications for admission due in Admissions Office
February 3, 4, Wed., Thurs.	Registration for all classes
February 5, Thurs.	Last day to register without late registration fee
February 8, Mon.	Classes begin
February 12, Fri.	Lincoln's birthday (holiday)
February 15, Mon.	Last day to register or add classes
February 22, Mon.	Washington's birthday (holiday)
March 11, Fri.	Applying deadline for candidates for graduation, Fall 1965
March 12, Sat.	Last day to drop a course with automatic "W"
March 14, Fri.	
April 11, Mon.	Spring recess begins
April 16, Mon.	Classes resume

COLLEGE CALENDAR

1964-65

SUMMER SESSION 1964

June 15, Mon.	First Summer Session begins
July 24, Fri.	First Summer Session ends
July 27, Mon.	Second Summer Session begins
August 21, Fri.	Second Summer Session ends

FALL SESSION 1964

August 15, Sat.	Undergraduate student applications for admission due in Admissions Office
September 9, Wed.	Graduate student applications for admission due in Admissions Office
September 14, Mon.	Faculty Orientation
September 15, 16, 17, Tues., Wed., Thurs.	Advisement, Registration, and Freshman Orientation
September 17, Thurs.	Last day to register without late registration fee
September 21, Mon.	Classes begin
September 25, Fri.	Last day to register or add classes
October 23, Fri.	Application deadline for candidates for graduation, Spring and Summer 1965
October 30, Fri.	Last day to drop a course with automatic "W"
November 11, Wed.	Veterans' Day (holiday)
November 26, 27, Thurs., Fri.	Thanksgiving recess
December 21, Mon.	Christmas recess begins
January 4, Mon.	Classes resume
January 21, Thurs.	Last day of classes
January 22, Fri.	Semester examinations
January 25-28, Mon.-Thurs.	

SPRING SESSION 1965

January 15, Fri.	Undergraduate and graduate student applications for admission due in Admissions Office
February 3, 4, Wed., Thurs.	Registration for all classes
February 4, Thurs.	Last day to register without late registration fee
February 8, Mon.	Classes begin
February 12, Fri.	Lincoln's birthday (holiday)
February 15, Mon.	Last day to register or add classes
February 22, Mon.	Washington's birthday (holiday)
March 12, Fri.	Application deadline for candidates for graduation, Fall 1965
March 19, Fri.	Last day to drop a course with automatic "W"
April 12, Mon.	Spring recess begins
April 19, Mon.	Classes resume

Orange State College

May 7, Fri.	Day of the Titan (not a holiday)
May 31, Mon.	Memorial Day (holiday)
June 2, Wed.	Last day of classes
June 4, Fri.	Semester Examinations
June 7-10, Mon.-Thurs. }	
June 13, Sun.	Commencement

SUMMER SESSION 1965

June 21, Mon.	First Summer Session begins
July 5, Mon.	Independence Day (holiday)
July 30, Fri.	First Summer Session ends
August 2, Mon.	Second Summer Session begins
August 27, Fri.	Second Summer Session ends

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Long Beach Independent Press Telegram, 604 Pine St., Long Beach 90801

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111 Sutter St., San Francisco 94104

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100 N. Cañon Dr., Beverly Hills 90008

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2930 West Imperial Highway
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THE CALIFORNIA STATE COLLEGES

The California State Colleges are a unique development of the democratic concept of tax-supported public higher education for all qualified students.

Spanning the state from Humboldt County in the north to San Diego in the south, the 16 campuses of the California State Colleges (with two additional campuses in the planning stage) represent the largest system of public higher education in the Western Hemisphere and one of the largest in the world. Current enrollment is more than 135,000 full and part-time students. The faculty and administrative staff numbers some 7,000.

The individual colleges, each with a geographic, curricular and academic character of its own, offer a solid basic program in the liberal arts. Beyond this, each college is noted for its individuality in academic emphasis which makes for a diversified system. Course offerings leading to the bachelor's and master's degree are designed to satisfy existing student interests and to serve the technical and professional manpower requirements of the state.

The California State Colleges are dedicated to rigorous academic standards. Constant striving for academic excellence is at the heart of the system. Each faculty within the system is a 'teaching faculty' whose primary responsibility is the instructional process on the teacher-student level, with appropriate recognition of the necessary and constructive role of research in any institution of higher education.

Responsibility for the California State Colleges is vested in the Board of Trustees, which is appointed by the Governor, and the Board's administrative arm, the Chancellor. The Trustees and the Chancellor set broad policy for the colleges while delegating considerable independent responsibility for implementation at the college level.

Although the oldest of the colleges, San Jose State College, dates back a century, the California State College system under an independent Board of Trustees was created by the Donahoe Act of 1960. Formerly, the colleges were under the jurisdiction of the State Board of Education.

Today, the California State Colleges are in a particularly dynamic period of their development. Prior to World War II, there were seven State Colleges with a peak total enrollment of some 13,000. Since 1947, nine new campuses have been developed and two more are scheduled to begin operation within the next two years. Enrollment in the system is expected to reach 180,000 by 1970.

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Fullerton, California

ACCREDITATION

Orange County State College is fully accredited by the Western Association of Schools and Colleges and the California State Board of Education.

PHILOSOPHY AND OBJECTIVES OF ORANGE STATE COLLEGE

The main functions of an institution of higher learning are to disseminate and advance knowledge. The philosophy which guides an institution can limit or promote the successful achievement of these objectives. Therefore, from its inception, Orange State College has directed its educational program toward the fullest possible development of the individuals who participate in it. For both faculty and students this entails a commitment to high standards of scholarship, a comprehensive rather than a narrow approach to major areas of study, and a concern with research and other creative activity.

The College holds to the belief that an enduring educational experience must be founded upon exploration of our cultural heritage, through basic studies in the liberal arts and sciences, and that it can and should at the same time prepare for success in a chosen occupation or profession. Accordingly, the required General Education program has as its objective the development in each student of:

1. The effective use and interpretation of the written and spoken language.
2. An understanding of the wide range of human endeavor and accomplishments in Liberal Arts and Sciences, their interrelationships, and the various choices and values they represent.
3. An understanding of information and principles in some areas of the Liberal Arts and Sciences in sufficient depth to encourage critical and creative thought and expression.
4. A spirit of inquiry into the past and into the future, in order to cope with conditions in the continually changing world.
5. An understanding of the rights, privileges and responsibilities of citizenship in the community and nation, and of effective participation in today's world.

In addition, the College requires of all students who are candidates for a degree—whatever their special purpose—the pursuit of a subject major.

(For specific details, see page 40.)

Scholarship Advisory Council

Dr. Clair G. Bignault
Corona del Mar, California
Mrs. Dorman L. Commons
Fullerton, California
Miss Eugene L. Kinsbury
La Habra, California

Daniel L. Stack
Fullerton, California
H. Nelson Warren
Fullerton, California
Doris Waters
Fullerton, California

HISTORY OF ORANGE STATE COLLEGE

Orange County is situated on a coastal plain southeast of the City of Los Angeles. A decade ago the county was thought of as being one of rural characteristics, with emphasis on the production of oranges and other citrus fruits. Today it is being referred to as one of the fastest growing counties in the nation. Between 1950 and 1963, the population grew 462.5% to a total of one million persons on October 1, 1963. Forty-eight percent of the population is under 25 years of age. During the decade preceding 1963, school enrollments grew 344%, and vehicle registration gained 227%. Since 1950, there was an increase of 415% in the assessed valuation. Much of the county is still rural, the county having a population density of 1.37 persons per acre. There are sections, however, that are as dense as 16.64 persons per acre. Every indication points to continued growth, with a predicted population of two million by 1980. Since 1952, over 30,000 acres of irrigated agricultural land have been converted to subdivisions, business and industry, freeways, and schools. The electronics industry is the leader in growth among industries and businesses in the county.

Orange State College was established by act of the Legislature under the terms of Chapter 1681 of the Statutes of 1957. On March 13, 1958, the Public Works Board selected the site of the College, located in the northeast section of the City of Fullerton. It now consists of 225 acres, and is bounded on the north by Yorba Linda Boulevard (formerly Pioneer Avenue), on the west by State College Boulevard (formerly Cypress Avenue), on the south by the extension of Nutwood Avenue, and on the east by the proposed Orange Freeway. The College is located within five miles of 60% of the industry and within 10 miles of 70% of the population of Orange County. It is also within easy driving range of Orange County beaches and mountains, and of the other cultural centers of Southern California and their recreation and entertainment areas.

Dr. William B. Langsdorf was appointed president of the College on January 16, 1959, and with two aides came to Fullerton on March 2, 1959, to begin planning for the opening of the new college. Arrangements were made with the Fullerton Union High School District to lease quarters for the College administrative offices on the Fullerton Union High School campus, and to hold classes at the Sunny Hills High School for the 1959-60 school year. During the first five years, the average annual enrollment has grown from 466 to 3,700 individuals. Envisioned are average annual enrollments of 10,000 in 1969-70; 15,000 in 1972-73; and 30,000 individuals when the College reaches its Master plan enrollment of 20,000 full time equivalent students in the early nineteen eighties.

In the Fall of 1960, the College opened classes on its own campus where it occupied twelve temporary buildings. The first permanent building, the Letters & Science Building, was completed in 1963. Thereafter, other permanent buildings will be opened in approximately the following order: Music-Speech-Drama Building and Physical Education Building, 1965; Library and Audio-Visual Center, 1966; Cafeteria, 1967; Humanities-Social Science Building and Art Building, 1968. Additional buildings are being planned for the future.

ACCREDITATION

Orange County State College is fully accredited by the Western Association of Schools and Colleges and the California State Board of Education.

MEMBERSHIP IN ORGANIZATIONS

The College is a member of the following distinguished educational bodies:

American Association of Colleges for Teacher Education

American Association of University Women

American Council on Education

Association of State Colleges and Universities

Western Association of Schools and Colleges

THE COLLEGE LIBRARY

The College Library is housed in the basement of the Letters and Science Building. It occupies an area of approximately 30,000 square feet. Seating is provided for 390 persons. Group study rooms, a typing room, carrels, and individual and group music listening spaces are available.

The main book collection will contain about 66,000 volumes at the beginning of the 1964-65 academic year. During the year about 12,000 volumes will be added to it. The Library also has a collection of about 6,500 volumes of sample elementary and secondary text books and juvenile literature, and a collection of about 2,000 pamphlets.

The Library is a selective depository of U.S. Government documents. This collection will reach a total of about 10,000 items in the course of the academic year. The Library is also a depository for the pilot program of the California Curriculum Project. This collection, combined with previously purchased materials, will contain about 1,400 items.

In addition to these collections the Library has about 5,000 reels of microfilmed U.S. Government documents, chiefly State Department records, but also including such things as the Congressional Record; about 5,000 reels of other microfilmed materials, mostly files of newspapers and periodicals, and about 3,000 volumes on micro-opaque cards. Readers for these materials are available in the Periodicals and Documents area.

The Library subscribes to about 1,200 periodicals. In addition to the filmed backfiles mentioned above, this collection contains about 3,000 bound volumes. Besides attempting to build a balanced collection of basic works, the Library, as a part of its development program, has concentrated its efforts in several subject areas. As a result, relatively strong collections are now available in such fields as World War II, international relations since 1870, Kant, Shakespeare and Melville. These collections will increase in strength and number during the next several years.

Library hours are posted at the main entrance. A Library handbook is available at the Reference Desk. Professional librarians are available at all times to aid students and faculty in the use of all library resources.

SUMMER SESSIONS

The College conducts a six-week summer session followed immediately by a four-week summer session. There will also be a dozen two-week and three-week workshops running concurrently. The six-week session begins June 15 and closes July 24, while the four-week sessions begins July 27 and closes August 21. Day and evening classes are scheduled and credits earned in the summer sessions meet degree and credential requirements with the same validity as credits secured in the fall and spring semesters. A maximum of one unit of college credit may be earned for each week of attendance.

In addition to much of the regular curriculum, summer offerings include special workshops and seminars for teachers and other professional groups. A program of recreational activities is planned to serve a wide variety of interests.

A tuition fee of \$14.25 per unit is charged, plus an associated student membership fee of \$2 per person. The Summer Session Class Schedule announcing all courses is published in March and may be obtained by writing the Dean of Educational Services and Summer Session.

EXTENSION PROGRAM

Off-campus classes offered by the College are organized under the Extension Program. Such work is given in response to a need from persons who, because of distance from the campus, find it difficult to take residence courses. In some instances, extension classes may be undertaken at locations nearby because of special facilities which are not available on campus.

Extension courses may be planned for those wishing to earn college credit and under certain conditions this credit can be applied toward a degree or a credential. Courses may be modified and designed to meet the particular needs of certain groups and may be initiated at various times during the year.

Tuition for extension courses is \$10 per unit for lecture courses, \$13 per unit for activity courses, and \$20 per unit for laboratory courses (subject to change). For full details concerning extension work, write the Dean of Educational Services and Summer Sessions.

OVERSEAS STUDY PROGRAMS

State College students who qualify may participate in overseas study programs of the California State Colleges. Upper division and graduate students may undertake a full academic year at major institutions of higher learning in Asia, Europe and Latin America. Academic work successfully completed at the cooperating universities abroad may be applied toward the degree requirements of State Colleges with the approval of the students' major advisors and in accordance with college regulations. Detailed information may be obtained at the office of the Dean of Students or by writing to the Office of International Programs, 1600 Holloway Avenue, San Francisco, California 94132.

THE ORANGE STATE COLLEGE FOUNDATION

The Orange State College Foundation was established and incorporated in October 1959 to "provide essential student and faculty services which cannot be provided for from state appropriations; to supplement the program and activities of the College in appropriate ways; and to otherwise assist the College in fulfilling its purposes and in serving the people of the State of California—especially those of the area in which the school is located.

Services provided by the Foundation include the operation of various College auxiliary organizations, administration of scholarship and student loan funds, sponsored research programs and certain institutes.

The Foundation's over-all policies are administered by a Board of Trustees made up of members of the College faculty and administration. An advisory council to the Foundation composed of leading industrial, scientific, business and civic leaders has also been established to provide the Board with counsel and advice.

STUDENT PERSONNEL SERVICES

Student services at Orange State College are centered in the Office of the Dean of Students. The major divisions are admissions and records, counseling and testing, student activities, health services and student placement. Housing, part-time employment, financial aids, student discipline, and other similar concerns are also the direct responsibility of this office.

STUDENT ACTIVITIES

The faculty of the College recognizes the important role of student activities in the growth and development of young people in our society. The scope of the activities program includes areas of interest to both day and evening students attending the College. Every student is encouraged to participate in as many activities as his free time allows.

All registered students are members of Associated Students of Orange State College. The Associated Students are governed through the executive, legislative, and judicial branches of the Associated Students organization. The president and commissioners constitute the executive branch which has the responsibility for the development and administration of the program, including such activities as publications, inter-collegiate athletics, intramural athletics, forensics, music, and social affairs. The legislative branch, composed of the Associated Student Senate, has full responsibility for legislation by which this program is directed, and allocation of the Associated Students funds for the program. The judicial branch serves as the legal body for interpretation of the constitution and enforcement of Associated Student policies.

Student Organizations

Student organizations are encouraged and aided by the College whenever students express a desire for activities which will add to their educational opportunities. As a relatively young institution, the development of new organizations to serve the needs of a growing student population is constantly experienced. Organizations currently exist with their major emphasis on service, social activities, special interests, religious interests, academic honors, and professional interests.

Student Publications

The weekly College newspaper, the Titan "Times", and the Orange State College magazine, published three times a year, are products of the journalism classes and sponsored by the Associated Students. In addition, a handbook is available for use by organizations in the development and operation of their program. The "Promethean", a literary magazine, is also published by students.

Student News Bureau

The Student News Bureau was organized in 1960 to provide the outside press with news of student activities on the campus. It is financed in part by a budgeted allocation from Associated Students and is supervised by the College Publications Manager.

Athletics

A year-round program of intramural athletics includes flag-football, softball, tennis, golf, volleyball, basketball, and other sports. Participation by students and faculty is encouraged. Intercollegiate athletics consist of teams in cross-country, basketball, tennis, golf, baseball, and track.

Home games are played in the Fullerton Junior College gymnasium. As an independent in athletics, the College is afforded flexibility in scheduling athletic contests with many colleges and universities on the West Coast.

In the spring of 1960, a group of Orange County citizens organized a Boosters Club to help foster wholesome intercollegiate athletic competition at Orange State College. Its members are dedicated to the encouragement of a sound program of athletics and are contributing financially and by way of enthusiasm to helping to develop a first-rate athletic program based on a well-rounded concept of the relationship between sports and academic achievement. All athletic teams, with the exception of baseball, compete under rules of the National Collegiate Athletic Association (NCAA). Membership is also held in the National Association of Intercollegiate Athletics (NAIA).

Intramural Activities

In close cooperation with the Office of the Associate Dean of Students, Activities, the intramural program is conducted on a seasonal basis which involves a variety of athletic and recreational activities for both men and women.

Rules and regulations which govern participation in the intramural program are available in the office of the Director of the Intramural Program or in the Office of Student Affairs.

Alumni

During 1961, the Alumni Association was formed to help keep graduates informed of activities and development of the College and to provide communication among the members of the Association. The yearly Homecoming is the high point of alumni activities.

Housing

Because of the importance of the living arrangements to the educational achievement of students, Orange State College requires that all students under 21 years of age, who are not married, must live either at home or in college approved housing. Residence halls, designed specifically for the students and program at Orange State College, are available for those students who wish to live away from home during their college years. Approved housing is limited to the residence halls as long as space exists.

Other Associated Student Sponsored Activities

Each semester the Music Department presents choral and instrumental performances open to the members of the college and community. The Speech and Drama Department produces one-act plays in addition to a regular three-act play each semester. The Forensics team has an active program and participation and achievements has gained wide-spread recognition in collegiate circles.

STUDENT HEALTH SERVICES

The Student Health Center is open to students during the day, Monday through Friday, for consultation and limited treatment. Under the direction of the College Physician, emergency treatment is available and health examinations for credential purposes are given. Also an immunization program is offered. Any student requir-

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ing followup medical care as recommended by his personal physician may obtain such services through the Health Center. A panel of consulting specialists has been established and its members utilized according to specific needs. At the time of application for admission, a health history form is completed which is filed in the Health Center where all student health records are kept. Students requiring credential examinations may have them completed by their own physicians if desired. Otherwise, appointments for this purpose may be made in the Student Health Center.

All undergraduates regardless of the number of units to be taken, must submit completed Health History and Physical Examination forms. In addition, evidence of a negative chest X-ray, taken within 12 months prior to the opening of College, must be presented. The tuberculin skin test may be obtained in lieu of an X-ray without cost at the Student Health Center. Evidence of a smallpox vaccination within the past five years is also required.

Health, Accident, Hospital Insurance

Application forms for supplementary health, accident, and hospital insurance are available on a voluntary basis at low premium through the Associated Students' Business Office. This type of coverage is suggested since the cost of medical care is usually highest in the category of major illness or injury which is beyond the scope of campus services. This type of insurance is required of all students living in the residence halls.

Night Services

No staff is available for night services of any kind, and there are no off-campus calls made at any time.

PLACEMENT SERVICES

The Office of Placement Services serves the student during his college years, as well as after graduation.

Part-time Placement

Assistance in securing part-time employment, needed by many to complete their education, is given by this office. Students wishing part-time work, either on or off campus, must register for such employment at the beginning of *each* semester. Secretarial skills are in most demand, but calls come for school bus drivers, custodians, clerks, youth leaders, tutors, sitters, gardeners, etc.

Educational Placement

For students who are in the final semester of a credential curriculum, the Placement Office provides a distinctive set of services, looking toward employment by the school districts. One such service is to gather and keep current a personal file of professional information, which is copied and mailed to employing districts on request. Another service is to receive and make available information on teaching, pupil services, and administrative openings.

Business, Industry and Government Placement

The Office's service to students seeking business, military or public service careers involves assistance in defining occupational preference, providing active job leads, making up résumés, and arranging interviews, either on or off campus.

COUNSELING SERVICES

Counseling

Students who need assistance with such problems as choosing an academic major or vocational goal, with study skills, or with personal problems affecting their academic progress may obtain help through the Counseling Center. The professional counseling staff has available a variety of resources including occupational information files, special testing materials, college catalogs, and directories of various kinds which may be used to assist the student.

The Counseling Center also maintains contact with agencies and professional persons in the community to whom students may be referred.

Testing

The testing programs at Orange State College are designed to serve a variety of purposes.

1. The primary purpose is that of giving advisers and Counseling Center personnel supplementary information to use in helping the individual student.
2. Test results are also used to aid in the selection of students who are applicants for admission to the College, and to various programs within the College.
3. A third use is that of identifying students who have deficiencies in specific skills, such as composition, reading, and mathematics.

Testing requirements for students seeking admission are listed in the Admissions section of the catalog. Students seeking information about testing requirements for specific programs should inquire in the appropriate instructional division or the Counseling Center.

FINANCIAL AIDS

Scholarships

A limited number of scholarships are available for outstanding upper division and graduate students. No scholarship funds exist at present for freshmen. Qualified students should obtain scholarship applications from the Financial Aids Officer and return by April 15 for the Fall semester and December 15 for the Spring semester. Scholarship applications are carefully evaluated by the Financial Aids Review Committee, and awards are based on previous scholastic record, personal qualifications, and financial need. Some scholarships are awarded to students majoring in specified fields; departmental recommendations are heavily weighted in such instances.

Emergency Loans

As a result of the generosity of individuals and groups interested in Orange State College, an Emergency Loan Fund has been established to provide temporary assistance to students in financial need. Applications should be made to the Financial Aids Officer.

National Defense Student Loans

Orange State College participates with the Federal Government and the State of California in making loans available to students under the provisions of the National Defense Education Act.

Entering freshmen as well as students in advanced standing in any field of study are eligible to apply, although the law provides that special consideration shall be given to (a) students with superior academic background who express a desire to teach in elementary or secondary schools, and (b) students whose academic background indicates a superior capacity or preparation in science, mathematics, engineering, or a modern foreign language.

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The maximum loan to one individual is \$1,000 in any one year and no more than \$5,000 total. The average loan at Orange State is usually less than the maximum. Loans must be repaid with 3 percent interest over a period of 10 years beginning one year after the individual ceases to be a full-time student. Full-time elementary or secondary school teachers may have up to 50 percent of the loan cancelled upon verification of teaching status.

Applications for the NDSL program are available from the Financial Aids officer.

United Student Aid Funds

Long term loans to help finance college expenses are also available to deserving students who have completed the freshman year. USA Funds, a private, non-profit corporation, will endorse low-cost, long-term bank loans upon recommendation of the College. The College also participates through contributions to the USA Funds reserve.

A maximum of \$1,000 a year—or a combined total of \$3,000—may be borrowed for undergraduate and/or graduate education. The student repays the loan in 36 monthly installments beginning four months after he leaves school. Interest maximum is 6% simple. Applications and information are also available from the Financial Aids officer.

ADMISSION TO THE COLLEGE

Admissions standards in the California State Colleges are prescribed by the Trustees of California State Colleges and are stated in the California Administrative Code, Title 5, Education,* which provides a uniform pattern of admissions regulations for all the colleges. For 1964-1965 the Orange State College requires students listed below are somewhat more restrictive than the other State Colleges.

Admission of Freshmen

A high school graduate must meet one of the following requirements, (a) or (b). All freshmen applicants must also complete the required entrance examination in order that their applications be considered. Orange State College requires students to submit the results of either the American College Test (ACT) or the Scholastic Aptitude Test (SAT).

- (a) The applicant must have earned 14 or more semester grades of A or B in subjects, taken during the last three years of high school, other than physical education, military science and remedial courses. Ten of the 14 grades must be in college preparatory subjects selected from one or more of the following fields (no specific course pattern is required):

- (1) English, including speech, drama, and journalism, other than activity courses.
- (2) Foreign languages.
- (3) Mathematics.
- (4) Natural Sciences.
- (5) Social Sciences.

- (b) The applicant must have earned 10 or more semester grades of A or B in subjects, taken during the last three years of high school, other than physical education, military science, and remedial courses, and have achieved a score at or above the fortieth percentile on national college freshmen norms of a standard college aptitude test. Orange State College requires students to submit the results of the American College Test (ACT) or the Scholastic Aptitude Test (SAT).

* The detailed and legal statement of the requirements for admission to the state colleges is to be found in the California Administrative Code, Title 5, Education, section 40600-41200.

The California State Colleges will change admission requirements for entering freshmen in the Fall of 1965. High School students who are planning to apply for admission to a state college at that time should consult with their high school counselors about the new freshmen admission standards during the 1964-65 academic year. Counselors will be informed of these new requirements and all developments concerning them as the year goes on.

The Admission of Undergraduate Transfers

An applicant who meets the requirements for admission with freshmen standing and who has earned credit in one or more accredited junior colleges, colleges, or universities may be admitted if he has a grade point average of 2.0 (grade C on a five-point scale) or better in the total program attempted at such colleges or universities and is in good standing at the last degree-granting college or university attended.

An applicant who does not meet the requirements for admission with freshmen standing must as a condition for admission have earned 60 or more units of college credit with a grade point average of 2.0 (grade C on a five-point scale) or better in the total program attempted and must be in good standing as noted above.

Procedures for Admission (All Undergraduate Students)

All students, both full-time and part-time, will be required to matriculate.

- (1) Submit a completed Application for Admission accompanied by the \$5 required application fee.
- (2) Have the high school of graduation send directly to Orange State College a transcript of record.
- (3) Have each college attended (if any) send directly to Orange State College a transcript of record.
- (4) Submit the scores from one of the two national testing programs described below.
- (5) Submit health history and physical examination forms to the Student Health Center. Complete other requirements.

UNDERGRADUATE ENTRANCE TESTING REQUIREMENTS

For admission to Orange State College for Fall, 1964, and Spring, 1965, ALL new undergraduates applying for admission are required to submit scores from *one* of two national testing programs *before permission to enroll in classes will be granted*. The testing programs are described below.

This requirement *DOES NOT* apply to:

- a) Students who have a bachelor's degree from an accredited institution at the time of entrance.
- b) Undergraduate students who have previously attended OSC and who have completed the entrance tests required at the time of their first admission.

Tests will be administered at *established test centers* on the dates shown below.

The procedure is as follows:

1. Obtain a registration form and a Student Information Bulletin for either ACT or SAT from your high school or junior college counselor, from one of the addresses below or from the OSC Testing Center
2. Select the test center nearest home from the list printed in the bulletin. Send the completed registration form and the appropriate test fee to the address shown in the bulletin. It should be mailed in time to be received no later than the deadline shown below

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3. Take either the ACT or SAT at the center assigned on one of the following dates:

AMERICAN COLLEGE TESTING PROGRAM (ACT)

<i>Test Date</i>	<i>Registration Deadline</i>
Fall '64 Feb. 15, 1964	Jan. 25, 1964
Apr. 25, 1964	Apr. 4, 1964
June 20, 1964	June 6, 1964
Sept. 5, 1964*	Aug. 22, 1964
Spr. '65 Nov. 7, 1964	Oct. 24, 1964
Jan. 30, 1965*	Jan. 16, 1965

SEND REGISTRATION FORM TO:

American College Testing Program
Box 6748
Long Beach 15, California
(Fee \$4.00—OSC Code No.
For Reports—0355)

SCHOLASTIC APTITUDE TEST (SAT) OF THE COLLEGE ENTRANCE EXAMINATION BOARD

<i>Test Date</i>	<i>Registration Deadline</i>
Fall '64 Mar. 7, 1964	Feb. 8, 1964
May 2, 1964	Apr. 4, 1964
July 8, 1964	June 10, 1964
Spr. '65 Dec. 5, 1964	Nov. 7, 1964
Jan. 9, 1965	Dec. 12, 1964

SEND REGISTRATION FORM TO:

College Entrance Examination Board
Educational Testing Service
Box 1025
Berkeley 1, California
(Fee \$5.00—OSC Code No.
For Reports—4589)

4. Have ACT or SAT scores reported to the Testing Center, Orange State College. Use the appropriate Code Number for Score Reports on your registration form.

If either ACT or SAT has been taken, send \$1.00 to the appropriate testing agency and request that scores be reported to the Orange State College Testing Center. Use appropriate code number when requesting such reports.

Additional tests are required for placement in freshman classes and for admission to public school credential and graduate programs. Information about the specific requirements may be obtained from the Division Offices concerned, or from the OSC Testing Center.

A change in the Entrance Testing Requirement is under consideration beginning with admission in the Fall Semester, 1965. Appropriate announcements will be made in the 1965-66 catalog and through information leaflets distributed by the Office of Admissions.

Graduate Students Requirements—Unclassified Status

A student who has earned an acceptable bachelor's degree from an accredited college or university may be admitted in unclassified graduate status. Admission with unclassified graduate status does not constitute acceptance as a master's degree candidate.

Graduate Students Requirements—Classified Status

For information regarding requirements for graduate degree programs, see page 44 of this catalog.

* Special administration at Orange State College only. Register through Long Beach office. Score will be reported to Orange State College only.

Procedures for Admission—Graduate Students

- A. Student planning to work toward a degree or credential at Orange State College will follow the procedure shown below:
- (1) Submit a completed Application for Admission accompanied by the required \$5 application fee.
 - (2) Have each college attended send directly to Orange State College *duplicate* (two) transcripts of record.
 - (3) Submit health history and physical examination forms to the Student Health Center. Complete other immunization requirements.
- B. Students not planning to work toward a degree or credential at Orange State College and wishing to take a maximum of 6 units any semester will submit the following:
- (1) A completed Application for Admission accompanied by required \$5 application fee.
 - (2) Satisfactory proof of degree, e.g., college diploma.
 - (3) No evaluation of transfer credit will be given to such students and no regular advisement is offered. Students desiring advisement should follow the procedure listed immediately above in paragraph No. 1.

Admission of Foreign Students

At the present, Orange State College does not accept foreign student applicants directly from foreign countries, with certain rare exceptions. Only two categories of foreign students will normally be accepted:

- (1) Those who have completed a two year transfer program in a junior college in the United States with a good academic record.
- (2) Those who have completed a bachelor's degree in an accredited college in the United States and wish to enroll as graduate students.

Application procedures are the same as for other students, except that foreign language transcripts must be accompanied by certified English translations.

Admission From Non-Accredited Colleges

An applicant who has attended a non-accredited college or university may be considered for admission to a state college if he meets the standards listed for transfers from accredited colleges and universities.

Admission on Academic Probation

An applicant who does not meet the requirements set forth above is eligible for admission with advanced undergraduate standing on probation, if in the opinion of the proper college authorities, he is likely to succeed in college.

Ordinarily, consideration for probationary admission is granted only to the mature applicant who, while his total college record does not meet the admission requirements, has demonstrated good academic ability through recently completed college work elsewhere.

Applicants who are admitted with a grade point deficiency are given probationary status and are expected to remove the entrance deficiency during the first year at Orange State College. A student admitted on probationary status may be restricted by his adviser to a limited program.

Admission of Auditors

A properly qualified student may register in classes as an auditor without credit, provided there is room. An auditor need not meet the regular standards for admission, but must pay the same fees as other students. An auditor may not change his registration to obtain credit after the last date to add courses to the study list. An

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auditor is not permitted to take examinations in the course. No credit will be granted toward a degree or credential for such courses.

Admission to Credential Programs

Admission to the College as a student does not constitute admission to the teaching credential program. Students who intend to work toward credentials must make application to the Division of Education during their first semester of attendance. Details are available from the Division of Education.

Cancellation of Admission

A student who is admitted to the College for a given semester but who does not register in the specified semester will have his admission cancelled. The student must file a new application form when he again seeks admission and must meet the current admission requirements.

Readmission

Students in "good standing" may be readmitted to the College after an absence of one or more semesters by filing a new Application for Admission. Students who have attended another institution since their last attendance at Orange State College must have a transcript of record from that institution sent directly to the Office of Admissions.

The Summer Session Student

The college does not require an advance application or transcripts from all students registering for credit courses in the Summer Session. However, students must be high school graduates and are expected to have satisfied the prerequisites for the courses in which they register. Admission to Summer Session does not grant admission to the regular session.

EVALUATIONS

Evaluation of Transfer Credits

The Office of Admissions will evaluate previous college work in terms of its relationship to the requirements of Orange State College. All degree and credential candidates will be issued a Credit Summary, which serves as a basis for determining specific remaining requirements for the student's specific objectives. Once issued to a student, the evaluation remains valid as long as the student matriculates at the date specified, pursues the objective specified, and remains in continuous attendance. The student will not be held to additional graduation requirements unless such requirements become mandatory as a result of changes in the California Administrative Code or the California Education Code.

In view of the foregoing regulations, the student should notify the Office of Admissions immediately if he changes the objective specified in his evaluation. While the evaluation for a student remains valid, the student is held responsible for complying with all changes in regulations and procedures which may appear in subsequent catalogs.

Acceptance of Credit

Credit for work completed at accredited institutions will be accepted toward the satisfaction of degree and credential requirements at Orange State College within limitations of residence requirements, junior college transfer maximums, and course applicability.

General Policy

Transfer credit is not limited to those courses which precisely parallel the courses offered at Orange State College. Credit is normally granted for all courses completed at other accredited institutions which reasonably correspond to one of the various curricula described in this Catalog. Courses which do not appear to correspond with offerings at Orange State College are ordinarily not granted transfer credit. Courses in vocational or shop-type courses, and remedial courses are examples of courses not accepted for transfer credit. Students who have completed work at professional schools in the field of art or music or similar fields may expect a reduction in credit if the work completed carries a credit value in excess of that normally allowed for corresponding courses or areas at Orange State College.

Transfer of Credit From a Junior College

Upper division credit is not allowed for courses taken in a junior college. Credit is not allowed for courses in professional education taken in a junior college. This does not invalidate credit for pre-professional courses taken at a junior college, such as introduction to education, art or design, arithmetic and/or music for classroom teachers. After a student has completed 70 units of college credit, whether at a junior college or a four-year institution, or at both, no further junior college units will be accepted for unit credit.

Credit for Military Service

Students who have been in military service for at least a year may be granted six units of credit. Courses taken in service schools may be given credit on the basis of an evaluation which determines that they are of college level. Any credit for military experience will be given only upon request. Records verifying such experience must be filed with the Office of Admissions.

Credit for Extension and Correspondence Courses

The maximum amount of credit through correspondence and extension courses which may be allowed toward the bachelor's degree is 24 units, of which not more than 12 may be transferred from another college or university.

Credit by Advanced Placement

Students who have successfully completed courses in the Advanced Placement Program shall be granted credit toward graduation, advanced placement in the College's sequence courses, and credit for curriculum requirements upon the approval of the major adviser and the chairman of the department(s) affected.

Credit by Examination Policy

Students may be granted credit for a course toward graduation and to meet curriculum requirements by the satisfactory completion of a "Challenge Examination" in that course requirement. The examinations are to be comprehensive and administered by the department in which the course is offered. Well in advance of the "Challenge Examination" for a course, the student will secure the written approval of his major adviser, the chairman of the department in which the course is offered, and the business office to indicate that an appropriate fee has been paid. Upon the successful completion of the examination the notation on the permanent record of the student will be made as "CR" for the course. Upon failure of the examination, the notation on the permanent record of the student will be made as "F" for the course. (CR is to indicate credit for the course with a passing grade.) Credit by examination may not be used to fulfill the minimum residence requirements. The "Challenge Examination" for any course may be attempted only once.

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Academic Advisement

All *undergraduate* students working toward a degree or credential are assigned an adviser in the major field. Those seeking a credential will also be assigned a professional adviser in the Division of Education and Psychology.

Graduate students in all divisions, except Education and Psychology, will be assigned a major adviser. In Education and Psychology, all will have a professional adviser. Those students seeking a credential for teaching in secondary schools will be assigned *both* a professional adviser and a major adviser.

Advisers are assigned by division chairmen. The adviser is basically a resource person who will help the student plan his academic program so that he meets the requirements of the major or credential objective in the most desirable manner. While the adviser can provide valuable information and suggestions to the student, the ultimate responsibility for the program the student plans and the courses he chooses lies with the student himself.

REGISTRATION

Registration is the final step in the matriculation process. When a student has been admitted by the Office of Admissions and has decided in a conference with his assigned adviser which subjects he wishes to take, he is ready for registration.

A *Class Schedule* containing details regarding courses offered and procedures to be followed for registration is made available prior to the beginning of each semester and summer session.

At the time of registration, every student is required to file a program card with the Office of the Registrar. The filing of a program card by the student and its acceptance by the College is evidence of an obligation by the student to perform the designated work to the best of his ability. It is strongly recommended that all undergraduates declare a major at the earliest practicable time and not later than at the time they have completed 60 units of college work. Withdrawal from, or neglect of, any course entered on the program card, or a change of program (including a change of section of the same course) without the formal permission of the Office of the Registrar, will result in a grade of F.

A student may not receive credit in any courses in which he is not registered.

FEES AND EXPENSES

Application Fee \$5.00

Registration Fees

Regular Students

Materials and service fee \$38.00

Associated Students fee 9.00

Total per semester \$47.00

Limited Students (1-6 units)

Materials and service fee \$19.50

Associated Students fee 4.00

Total per semester \$23.50

Music Studio Lesson Fee

Per semester \$70.00

Summer Session Fees

Per unit or fraction of unit	\$14.25
Associated Students fee	2.00

Extension Fees

Per unit or fraction of unit	\$10.00-\$20.00
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Other Fees or Charges

Non-Resident tuition fee (in addition to fees required of resident students, except for enrollment in extension or summer session):	
15 units or more per semester	\$250.00
Less than 15 units, per unit or fraction of unit	16.50
Non-Resident Foreign Students	
15 units or more per semester	\$127.50
Less than 15 units, per unit or fraction of unit	8.50
Late registration fee (in addition to other fees listed above)	5.00
Check returned from bank for any cause	2.00
Change of program fee	1.00
Transcript fee (no charge for first copy)	1.00
Failure to meet administrative required appointment or time limit (Special aptitude examinations, failure to keep appointments for health examination, special final examinations)	2.00

Auditors Pay the Same Fees as Others

Fee Schedule Subject to Change by State Authority

Refund of Fees

Upon withdrawal from College, the Materials and Service Fee may be refunded if written Application for Refund, on forms provided by the College, is submitted to the Registrar not later than 14 days following the day of the term that instruction begins; provided that the amount of \$2.00 shall be retained to cover the cost of registration. Late registration fees, change of program fees and application fees are not refundable.

The entire fee may be refunded in the event a student is unable to continue his registration because of a college regulation or because of compulsory military service. Application for refund under such circumstances may be made at any time prior to the date when the student receives any academic credit for the courses for which he is registered.

The difference between the applicable materials and service fee, less \$2.00, may be refunded if the unit load of the student is reduced to a lower materials and service fee category within the 14 days following the day of the term that instruction begins.

Parking Fees

Per Semester (Non-Reserved Spaces)	\$13.00
Coin operated parking gate—per admission	.25
SUMMER SESSION	
6 Week Period	5.00
4 Week Period	3.00

TYPICAL STUDENT EXPENSES

The following is an estimate of the major items of expense for single students attending Orange State College. It is not intended to be an exhaustive list, and it should be recognized that considerable variation exists on living expenses. Amounts shown are for one semester.

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<i>Expenses</i>	<i>Students Living in Campus Residence Halls</i>	<i>Students Commuting from Home</i>
Materials and Service Fee *.....	\$47	\$47
Other Fees (Parking, Health Insurance).....	21	21
Room	250	---
Board	250	---
Books and Supplies.....	50	50
Clothing	75	75
Laundry and Cleaning.....	25	25
Recreation	75	75
Transportation for Commuting Students.....	---	100
Total	\$793	\$393

* Note: Out-of-state students add an additional fee of \$250 each semester.

RECORDS

Grade Reports to Students

A report of the final grades assigned in classes is sent to each student at the end of each semester.

Transcripts

Upon request to the Office of the Registrar, each student will be provided with one official copy of his college record without charge. A charge of \$1 will be made for each additional transcript requested by the student. No transcript will be supplied for college work taken in other institutions.

VETERANS

Orange State College is approved by the Bureau of Readjustment Education, State Department of Education, to offer programs to veterans seeking benefits under state and federal legislation. All students seeking veterans benefits must have a degree or credential objective.

Applications for benefits should be filed well in advance of the semester in which the veteran plans to use these benefits in order to have the authorization at the time of registration.

P.L. 550

Application

If the veteran *has* attended an institution under P.L. 550 benefits before, the veteran must file an Application for Change of Place of Training (VA form 1992) through the Office of Veterans Affairs at the institution last attended under P.L. 550 benefits.

If the veteran has *not* attended an institution under P.L. 550 benefits before, application forms may be obtained from the Veterans Adviser at OSC.

Monthly Certification

Each month, the veteran must obtain an *Attendance Report Form* from the veterans adviser. This form must be signed by each of the veteran's instructors on the last class meeting of the month. This signature will verify satisfactory attendance for the month. When completed, the *Attendance Report Form* must be returned to the veterans adviser and the veteran must sign the IBM certification card that is forwarded to the VA. The *Attendance Report Form* must be returned to the veterans adviser on or before the 5th of the month to ensure receiving the subsistence check on time.

Subsistence Checks

The subsistence check should be received on the 20th of the month following the month of certification. Under no circumstances should this check be cashed if the amount is more than the veteran should have received. An overpayment accepted by the veteran will cause an indefinite delay or loss of future benefits. If the check has not been received by the end of the month following the month of certification, the veteran should notify the veterans adviser at OSC.

Change of Status

The Veterans adviser at OSC must be notified immediately of any change of address, major, unit load, number of dependents or any other change of status which may affect benefits.

Unit Load and Subsistence

<i>Units</i>	<i>Load</i>	<i>Single</i>	<i>1 Dependent</i>	<i>2 Dependents</i>
14 or more	Full	\$110	\$135	\$160
10 to 13	$\frac{3}{4}$	80	100	120
7 to 9	$\frac{1}{2}$	50	60	80
1 to 6	Less than $\frac{1}{2}$	Fees in monthly subsistence form (total for monthly payments equals amount of fees by the end of the semester).		

CAL VET

Application

If the veteran *has* attended an institution under Cal Vet benefits before he should obtain the IBM card authorization for training from the Office of Veterans Affairs at the last institution attended under Cal Vet benefits. This IBM card must be filed with the veterans adviser at OSC.

If the veteran has *not* attended an institution under Cal Vet benefits before, the application forms may be obtained from the Veterans Adviser at OSC.

Payment of Fees

If the veteran has filed his IBM authorization card with the veterans adviser at OSC prior to or at registration, the fees will be paid by the State. If the veteran files the IBM authorization card *after* registration, he may receive a check to cover the fees upon direct application to Cal Vet. The application for refund may be obtained from the Veterans Adviser.

Maintenance Allowance

If the veteran is registered for a full load (12 semester units) at OSC, he may receive approximately \$50 a month from Cal Vet as a maintenance allowance.

Enrollment Attendance Certificate

When the veteran registers, he must complete an enrollment certificate. He must fill out an attendance certificate on the 15th of each month only if he is receiving the maintenance allowance.

Veterans Attending Under Other State or Federal Legislation

Veterans anticipating attendance at OSC under other state or federal legislation should see the Veterans Adviser for further information.

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Dependents of Disabled or Deceased Veterans

Dependents of disabled or deceased veterans should see the Veterans Adviser for information concerning state and federal legislation which provides for the waiver of fees or for educational benefits.

ACADEMIC REGULATIONS

Students who have been admitted to the college are required to register each term at announced times and locations. Registration is not official until fees have been paid, and no student is allowed to attend classes until all steps in the registration process have been completed.

A number of Academic Regulations related to registration are listed below, and all students are expected to be familiar with them as well as other pertinent portions of the college catalog.

Statement of Residence

A Statement of Residence must be completed prior to registration for each student, day or evening. No student in continuous attendance during successive semesters is required to file a Statement of Residence after the initial filing. Any break in attendance, however, does require a new Statement of Residence.

Late Registration

The last day to register late each semester will be announced in the *Class Schedule*. The college calendar in the front of this catalog contains 1964-1965 registration dates. Late registrants will find themselves handicapped in arranging their programs and must by state law pay a \$5 late registration fee in addition to regular fees.

Change of Program

Each student is responsible for the program of courses listed at the time of registration. Changes may not be made thereafter without the filing of a Change of Program form in the Office of the Registrar. All applications for courses dropped or added incur a \$1 Change of Program fee.

Withdrawal from College

Students who wish to withdraw from college must complete a Withdrawal From College card. See section on Refund of Fees for possible refunds. No student may withdraw after the date shown on the College Calendar as the last day of instruction.

Grades for Withdrawal

Through the 6th week of instruction in the semester, the grade for withdrawal will be an automatic "W." Beginning with the 7th week, grades assigned will be "W" if the student is passing at the time he withdraws, or "F" if the student is failing at the time he withdraws.

Concurrent Enrollment

A student enrolled at Orange State College may enroll concurrently for additional courses at another institution only with advance written approval from the student's academic adviser. Permission will not be granted when the study load in the proposed combined program exceeds the units authorized at this College.

OTHER DEFINITIONS AND REGULATIONS

Unit of Credit

Each college semester unit represents three hours of college work per week for one semester. Courses are of three types:

- (1) Lecture—one hour in class plus two hours of study.
- (2) Activity—two hours of class plus one hour of study.
- (3) Laboratory—three hours in class.

Some courses may combine two or more of these types.

Classification in College

Undergraduate students who have completed 0-29 units of work are classified as freshmen, 30-59 units as sophomores, 60-89 units as juniors, and 90 or more as seniors.

Study List Limits

A student is normally permitted to enroll in a maximum of 16 units each semester. However, upon written approval of his adviser, the student may carry additional units. The foregoing limits apply to students who are attending college on a full-time basis. Students with outside responsibilities are strongly advised to reduce their study load.

Grading System

Satisfactory Grade	Grade Point Value
C	2
B	3
A	4
Cr	None assigned
Unsatisfactory Grade	
D	1
F	0
Special Grade	
E (Incomplete)	0
AU (Auditor) (no credit toward degree or credential)	None assigned
W (Passing withdrawal)	None assigned

With the exception of the grades of E, AU, W, and CR, all units attempted are computed in the student's grade point average.

Incomplete Work

A grade of E may be given only when, in the opinion of the instructor, a student cannot complete a course during the semester of enrollment for reasons beyond his control. Such reasons are assumed to include illness of the student, of members of his immediate family, extraordinary financial problems, loss of outside position, and other such exigencies. A student may remove a grade of E (incomplete work) by satisfactory completion of course requirements with the instructor and the grade will be changed on the student's permanent record card to that designated by the instructor. If the grade of E is not removed within one semester, unless this period is extended by proper College authority, the grade of E will be considered a permanent grade of F.

Repetition of Courses

When a course is repeated, the units and grade points of the repetition are included in the grade point average in addition to the units and grade points of

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the original course. When a course is repeated, where the original grade was passing, the repetition will carry no subject or unit credit toward a degree or credential. Grade point deficiencies incurred by courses completed at Orange State College may not be made up by courses taken at other colleges.

Examinations

Final examinations are required in all courses and are given at times scheduled by the College. Any exception to this schedule must be approved by the office of the Dean of Instruction. No make-up final examination will be given except for reason of illness or other emergencies verified by an authorized College office and by written permission of the instructor and division chairman.

Student Writing

Students will be required to demonstrate, in all classes where written expression is appropriate, their ability to write clearly and correctly about the materials of the course. Ability of a student to demonstrate writing proficiency shall be used as a part of the final grade determination in any course.

Student Conduct

The College properly assumes that all students are in attendance for the purpose of securing a sound education and that they will conduct themselves as mature citizens of the campus community. Compliance with not only the common law but with all regulations of the College is therefore expected. If, however, on any occasion a student or an organization is known to have compromised accepted standards of conduct and good taste, appropriate disciplinary action must be taken by authorities of the College. Conduct which is prejudicial to the good name of the institution by any student or student group will not under any circumstances be tolerated or overlooked. Every effort will be made to encourage and support the development of self-discipline and control by students and student organizations. The Dean of Students, aided by all members of the faculty and advised by the Student Affairs Committee of the faculty, is responsible to the President of the College for the behavior of students in their relationships to the College. The President in turn is responsible to the Chancellor and the Trustees of the California State Colleges who themselves are governed by specific laws of the State of California.

Honors-at-Entrance

Honors-at-Entrance are awarded to both freshman and transfer students who have demonstrated outstanding achievement in past academic work. A minimum grade point average of 3.5 is required. For freshman, this is based on college preparatory work taken during the last three years of secondary school while transfer student eligibility is based on courses accepted by this College as degree credit. A Certificate of Honors-at-Entrance is awarded in the Fall semester, and a notation of such an award is made on the student's permanent record card.

GENERAL REQUIREMENTS FOR THE BACHELOR'S DEGREE

A candidate for graduation should file an application for a Graduation Requirement Check in the Office of the Registrar by the end of the fifth week of the semester prior to the semester in which he expects to graduate. No graduation requirement check should be requested unless and until the senior has completed 100 semester hours (including the current work in progress). If the candidate does not complete the requirements in the semester indicated, *he must request a second graduation check indicating the new date.* A student is eligible for graduation if he is in good standing and fulfills the following requirements:

(1) General Education

General Education Program for Students Entering with Freshman Status

(For the philosophy and objectives of the College, including the required General Education program, see pp. 20, 40 in the introductory pages.)

To be eligible for the bachelor's degree at Orange State College, the candidate shall have completed 50 semester units of general education including at least 6 units in upper division courses. It is strongly recommended that English 101 and 102 be completed during the freshman year. The courses in general education shall be distributed in the following manner:

Minimum
Units

(a) Social Sciences 12

Courses in the Social Sciences shall include the following:

1. History 170A (3) or History 170B (3)—meets the state requirement in U.S. History.
2. Political Science 100 (3) or a combination of Political Science 101 (3) and Political Science 311 (3)—meets the state requirements in U.S. Constitution and California State and Local Government.
3. A minimum of 6 additional units required with at least one course from each of the following two groups:
 - a. Geography 121 (3), Sociology 201 (3)
 - b. Geography 121 (3), Geography 131 (3), Geography 333 (3), History 110A (3), History 110B (3), History 170A (3), History 170B (3), Political Science 101 (3), Political Science 331 (3), Political Science 340 (3), Political Science 351 (3), Sociology 201 (3), or Sociology 202 (3).

(b) Natural Sciences 9

Courses in the Natural Sciences shall include:

1. A minimum of 5 units from the following:
Biological Science 100 (2) and either Biological Science 140 (3) or Biological Science 160 (3)
2. A minimum of 4 units from the following: Physical Science 201 (4-5), Chemistry 101A,B (5,5), Physics 221 (4).

(c) Humanities 12

Courses in the Humanities shall include:

1. English 101 (3) and English 102 (3)
2. A minimum of 6 additional units required, consisting of three units each from the two groupings below.
 - a. Philosophy 110 (3), Philosophy 210 (3), Philosophy 310 (3), Philosophy 311 (3), Philosophy 451 (3)
 - b. English 202 (3), English 221 (3), English 334 (3), English 451 (3), Comp. Lit. 315 (3), Comp. Lit. 425 (3), or any upper division course in French, German or Spanish.

(d) Fine and Applied Arts 9

Courses in the Fine and Applied Arts shall include:

1. A minimum of 3 units from the following:
Speech 101 (3), Speech 231A (3), or Speech 211 (3)
2. A minimum of 6 additional units required which shall include at least one course from two of the following groups:
 - a. Art 100 (3), Art 101 (3), Art 103 (3), Art 104 (3), Art 107AB, (3,3), Art 111 (3), Art 401 (3), Art 402 (3)

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b. Drama 271 (3), Drama 272 (3)	
c. Music 100 (3), Music 101 (3), Music 151A (2), Music 151B (2), Music 161a,361a (1,1), Music 161b,361b (1,1), Music 161c,361c (1,1), Music 220 (2), Music 350 (3).	
(e) Psychology	3
Psychology 101 (3)	
(f) Economics or Mathematics	3
A minimum of 3 units from the following:	
Economics 200 (5), Economics 201 (3), Economics 200A (3), Economics 200B (3), Mathematics 120 (3), Mathematics 150A (4), Mathematics 100A (3), Mathematics 250A (3), or any upper division mathematics course.	
(g) Health and Physical Education	2
A minimum of 2 units required by completing four semesters of activity courses which include instruction in health education. A physical education activity course taken in the summer session may not be counted in lieu of a semester. Not more than one activity course within any one semester may be counted toward general education. Credit in intercollegiate athletics courses may meet not more than two semesters of the College general education requirement in physical education. Not more than six units of credit in physical education activities courses, including intercollegiate athletics, may be applied toward credit for graduation. (Persons who are over 25 years of age are not required to enroll for courses in physical education.)	
Total	50
<i>(The above requirements apply to all students who began college-level work in any institution in the Fall semester, 1963.)</i>	

General Education Program for Transfer Students

(For students transferring to Orange State College after completion of 30 or more college transfer units.)

To be eligible for the bachelor's degree from Orange State College, the candidate shall have completed a minimum of 50 semester units of general education including at least 6 units in upper division courses. This program, while providing for the same breadth as required for students entering as freshmen, allows for the necessary flexibility for the transfer student. The courses in general education shall be distributed in the following manner:

- | | |
|---|----|
| (a) Social Sciences | 12 |
| The social sciences shall include required instruction in U.S. History, U.S. Constitution, California State and Local Government and American ideals, and courses in the subject fields of: anthropology, economics, geography, history, political science, sociology, and similar fields. Courses must be selected from two or more of these fields. | |
| (b) Natural Sciences | 9 |
| The natural sciences shall include at least one course selected from the physical sciences and at least one from the biological sciences. The physical sciences include astronomy, chemistry, geology and physics. The biological sciences include botany, physiology and zoology. | |

(c) Humanities	12
The humanities shall include a year of instruction in college-level English composition and literature. The remaining units may be chosen from the following subject fields: comparative literature, English, philosophy, and advanced courses in French, German, Spanish, or other foreign languages.	
(d) Fine and Applied Arts	9
The fine and applied arts shall include a course in oral communication. Additional courses shall be chosen from the following subject areas: art, drama and music.	
(e) Psychology	3
This should be the standard introductory course in psychology.	
(f) Economics or Mathematics	3
Either a course in college mathematics which would have as its prerequisite a minimum of two years of high school mathematics or its equivalent, or a college-level introductory course in economics will meet this requirement.	
(g) Health and Physical Education	2
In addition to physical education activity, instruction in health education is required.	
Total	50

(The above requirements apply to all students who began college-level work in any institution in the Fall semester, 1963.)

(2) Units

- (a) Total Units
A minimum of 124 semester units is required for graduation with a Bachelor of Arts degree.
- (b) Upper Division Units
Completion of a minimum of 40 units of upper division credit is required.
- (c) Resident Units
Completion of a minimum of 24 semester units in residence is required. At least one-half of these units must be completed among the last 20 semester units counted toward the degree. Extension credit, or credit by examination, may not be used to fulfill the minimum residence requirement.

(3) Scholarship

- (a) A grade point average of 2.0 or better is required on all units attempted, including those accepted by transfer from another institution.
- (b) A grade point average of 2.0 or better is required on all units in the major.
- (c) A grade point average of 2.0 or better is required on all units attempted at the college granting the degree.

(4) Major

Completion of all requirements for a major as specified by appropriate college authority is required.

(5) Minor

Completion of a minor field is *not* required for the B.A. at this time.

(6) Approval and Recommendation of the Faculty of the College

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GENERAL REQUIREMENTS FOR THE MASTER'S DEGREE

Orange State College has been authorized to grant the following graduate degrees:

- Master of Arts in English
- Master of Arts in History
- Master of Arts in Social Sciences
- Master of Business Administration

Master's degrees in other areas are under consideration for submission to the Board of Trustees of the California State Colleges for its approval. Public announcement will be made of such added degrees as they are approved.

ADMISSION OF GRADUATE STUDENTS

(1) Admission to Unclassified Graduate Standing

- (a) For admission with graduate standing as an Unclassified Graduate student, a student shall have completed a four-year course and hold an acceptable baccalaureate degree from an accredited institution; or shall have completed equivalent academic preparation as determined by the College.
- (b) Admission to the College with graduate standing does not constitute admission to graduate degree curricula.
- (c) Admission to the College Summer Session does not constitute admission to the College. (See "Special Responsibilities of Students on Master's Degree Programs," below.)

(2) Admission to Graduate Degree Curricula: Classified Graduate Status

A student who has been admitted to Unclassified standing at the College may, upon application, be admitted to an authorized graduate degree curriculum of the College as a Classified Graduate student if he satisfactorily meets the scholastic, professional, personal, and other standards for graduate study, including qualifying examinations, as required by the Graduate Studies Committee and the instructional divisions and departments which offer the particular master's degree.

GENERAL REQUIREMENTS FOR THE DEGREE

To be eligible for the master's degree, the candidate shall have completed the following requirements:

(1) Advancement to Classified Graduate Status

For advancement to Classified Graduate Status for the master's degree, the applicant shall have met the following minimum requirements:

- a. The completion of requirements for admission to Classified Graduate standing as specified in the specific master's degree program.
- b. Such scholastic, professional, and personal standards, the passing of examinations, and other qualifications as the College may prescribe.

(2) Requirements for the Degree

- a. Thirty semester units of approved graduate work completed within seven years of the date when all the requirements for the degree are completed, except that the College, at its option, may extend the time for students who pass a comprehensive examination in the relevant course or subject field. Of the 30 semester units:

- (1) Not less than 24 shall be completed in residence.
- (2) Not less than 12 shall be in courses organized primarily for graduate students.
- (3) Not more than 6 shall be in extension or transfer credit.
- (4) Not more than 6 shall be allowed for a thesis, but the requirement of a thesis is optional with the College.
- (5) Not less than 15 shall be completed after advancement to Classified Graduate Status. (An exception may be authorized for students well advanced when new programs are initiated.)
- b. A grade point average of 3.0 (grade of B on a five-point scale) or better in all courses taken to satisfy the requirements for the degree.
- c. The completion of a satisfactory pattern of study in the department or division of the field of concentration as approved by the student's graduate advisor and committee.
- d. The recommendation of the faculty of the College before the degree is granted.

Within these general requirements for all Orange State College master's degrees there are other, specific, detailed requirements of a quantitative and qualitative nature for each specific degree, both as concerns prerequisites and program. These will be found in the description of master's degree programs, in each of the Divisions offering such degrees, later in this catalog.

SPECIAL RESPONSIBILITIES OF STUDENTS ON MASTER'S DEGREE PROGRAMS

In addition to the academic and other requirements for the master's degree, each student must take responsibility for initiating action at several points. Failure to initiate these actions will place his program in jeopardy. These specific student responsibilities are as follows:

1. Apply for admission to the College in Unclassified Graduate Status. This must be done with the Office of Admissions prior to the dates indicated in the College Calendar. A student must be in Unclassified Graduate Status in order to take any graduate studies in the College. This status is obtained by showing proof of a bachelor's degree from an accredited institution upon application to the Admissions Office. However, students should immediately proceed to follow Steps 2 and 3, below.
2. At the same time, or before, the student will have two copies of transcripts of all previous undergraduate or graduate studies in *other* colleges or universities forwarded to the Admissions Office. These will be requested by the student to be sent directly from the colleges or universities where these studies have been pursued. For previous studies taken at Orange State College, the student will arrange with the Registrar to make one copy of the transcript available. The added copy, in each case, will be sent to the advisor of the student.
3. State his objective on his application for admission (in Step 1, above) as "M.A. in _____." The student who has previously pursued graduate studies at Orange State College, and who has not indicated a master's degree objective, or who changes objective, will similarly indicate the objective on the blue Change of Objective card when registering.
4. Consult with his advisor in the field of his desired master's program, at registration time or before, to obtain information about prerequisites, courses he should take, and to develop an informal Study Plan.
5. Complete prerequisites as specified.

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6. Normally during the first semester of study, take the standardized tests required in his desired master's program, on dates as announced by the Test Center of the College. These must be applied for at designated dates, well in advance of the testing dates, on registration forms supplied by the department or Test Center, and fees must accompany the form.

If the specific tests required in the student's master's program have been taken elsewhere, consult with the Test Center well in advance for transfer of results to the Center, and arrange with the Center for subsequent transfer of test results to the department concerned.

7. If a full-time student, four weeks before the end of his first semester of study, or, if a part-time student, upon completion of from eight to twelve units of work on his graduate program, apply to the Registrar for Classified Graduate Status. Only students who achieve this status are candidates for the degree.
8. A week thereafter he must make an appointment with his advisor to complete the formal Study Plan for the master's degree, determine thesis or project title (if required), and determine if all requirements for Classified Graduate Status have been met.
9. File with the Office of the Registrar an application for graduation check eight weeks prior to the end of the semester or summer session when the program is completed.
10. Make an appointment with the advisor five weeks prior to the end of the semester or summer session when the program is completed, to assure that all requirements will be met.
11. Consult with the Registrar relative to the awarding of the degree.

DECLASSIFICATION

Graduate students in Classified Graduate Status shall be declassified for failure to maintain the required grade point average of the master's degree program, for other unsatisfactory performance in respect to scholastic or professional standards, or for failure actively to continue in the program during a twelve-month period. Such students shall revert to Unclassified Graduate Status. Students whose performance is found to be seriously below the quality required of graduate students may be required to withdraw from all graduate courses.

MINIMUM FULL-TIME LOAD FOR GRADUATE STUDENTS

Twelve (12) hours of course work per semester shall constitute a minimum full-time load for graduate students.

WAIVER OF TUITION FOR NON-RESIDENT GRADUATE STUDENTS

Worthy graduate students who are not residents of California may, under certain circumstances, obtain a waiver of the non-resident tuition fee. Inquiries should be directed to the Coordinator of Graduate Studies.

INTERNATIONAL STUDY

The College participates in the California State Colleges' program of study abroad. Under this program, limited studies taken at designated foreign universities, when arranged in advance, may be applied toward the requirements of a degree awarded by the College. It is important that plans be completed several months in advance of starting such a program. For details consult the Coordinator of Graduate Studies (or the Dean of Students).

GRADUATE ASSISTANTS

There are a limited number of appointments as graduate assistants available to outstanding graduate students who are working on graduate degree programs. These may pay up to \$1100 per semester. If interested, consult with the Chairman of the Division in which degree study is being taken.

READMISSION

Graduate students who fail to register at Orange State College during any semester must apply for readmission to the College prior to the dates for admission indicated in the College Calendar at the front of this publication.

For further information concerning admission to graduate work, requirements for the master's degree, and procedure to follow in obtaining the master's degree, please write or contact the Office of the Coordinator of Graduate Studies, Orange State College, 800 North State College Boulevard, Fullerton, California.

SCHOLASTIC REGULATIONS

Honors At Graduation

Honors at graduation have been defined by the Faculty Council in three classifications:

With Honors	GPA 3.5
With High Honors	GPA 3.85
With Highest Honors	GPA 4.0

Dean's List

Academic achievement is recognized with the publication each semester of a list of students whose grade point average for the previous term has been 3.5 or better. Students are notified in writing by the Dean of Students when they have earned this distinction.

Academic Probation

It is the purpose of academic probation to identify and to bring to the attention of appropriate authorities the student who is experiencing academic difficulties. Therefore, students whose records fall into any one of the following categories are placed on academic probation:

- (1) Where the cumulative grade point average on all work attempted at all institutions attended is below a C (2.0).
- (2) Where the cumulative grade point average on all work attempted at Orange State College falls below a C (2.0).

Academic Dismissal

It is the purpose of academic dismissal to give the student an opportunity to review carefully his educational experiences away from the college environment. This "break" will normally be imposed before the student's record has reached the point where it will preclude a continuation of his educational program at a later date. Therefore, students whose records fall into the following categories will be *subject to dismissal*:

- (1) Where the record shows below a C (2.0) average in a regular semester or summer session when the student is already on academic probation. (This category does not apply to students admitted on probation.)
- (2) Where after two semesters on probation a student has not attained a grade point average of C (2.0) on all work attempted at Orange State College and on all work attempted at all collegiate institutions attended.

Orange State College

- (3) Where the academic record of the student indicates serious academic difficulty.

Removal of Probation

A student will be automatically removed from academic probation when all the following conditions are met:

- (1) The student's cumulative grade point average on all work attempted at Orange State College is a C (2.0) or above.
- (2) The student's cumulative grade point average on all work attempted at all collegiate institutions attended is a C (2.0) or above.

Readmission After Academic Dismissal

A student may apply to the Office of Admissions for readmission after academic dismissal upon completion of the period of dismissal.

Good Standing

"Good standing" indicates that a student is eligible to continue or to return, and is free from financial obligation to the College and from disciplinary action. A student under academic or disciplinary dismissal is not eligible to receive a statement of "good standing" on transcripts issued by Orange State College.

RIGHT OF PETITION

Students have the right to petition any academic action taken by the College in accordance with established regulations. When a problem arises where this petition right should be exercised, the student should be referred to the Office of Admissions and Records. He will be permitted to file a petition on a form designated for this purpose. All petitions must first be reviewed by the student's adviser and initialed by him. The Petitions Committee will then take action on the petition and the student will be notified of this decision. A copy of the action will also be placed in the student's folder in the Office of the Registrar.

Students also have the right to appeal any disciplinary action taken by appropriate College authority. This may be done by requesting a hearing at a regular meeting of the Faculty Committee on Student Affairs, or at a special meeting if the matter is deemed urgent. Such requests should be filed in the Office of the Dean of Students who will schedule a hearing at the earliest possible time.

COLLEGE CURRICULA

Orange State College has been authorized to offer the following degree programs which are described on the pages listed:

	Page		Page
A. Art	72	B.A. History	104
A. Biological Science	94	B.A. Humanities	81
A. Business Administration	34	B.A. Mathematics	97
A. Chemistry	95	B.A. Music	80
A. Communications	90	B.A. Philosophy	91
A. Drama	74	B.A. Physics	96
A. Economics	53	B.A. Political Science	103
A. English	86	B.A. Psychology	107
A. French	88	B.A. Sociology	108
A. Geography	101	B.A. Spanish	83
A. German	82	B.A. Speech	87

The following master's degree programs have also been authorized:

B.A. Business Administration	M.A. History
A. English	M.A. Social Sciences

Courses of study are organized into six instructional divisions of the College: Business Administration and Economics, Education, Fine and Applied Arts, Humanities, Science and Mathematics, and Social Sciences. These courses are listed below by subject-matter field and instructional divisions:

Courses	
Accounting	Business Administration and Economics
Anthropology	Humanities
Art	Fine and Applied Arts
Education	Education
Physical Science	Science and Mathematics
Education	Business Administration and Economics
Administrative Leadership	Humanities
Finance	Fine and Applied Arts
Economics	Business Administration and Economics
Education—Foundations	Education
Education—Elementary	Education
Education—Secondary	Education
Education—School Services	Education
English	Humanities
English Education	Humanities, Education
French	Business Administration and Economics
Foreign Languages Education	Humanities, Education
Geography	Humanities
History	Social Sciences
Mathematics	Humanities
Math Education	Education
Music	Social Sciences
Philosophy	Humanities

COLLEGE CURRICULA

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	Page		Page
B.A. Art	72	B.A. History	104
B.A. Biological Science	94	B.A. Humanities	86
B.A. Business Administration	54	B.A. Mathematics	97
B.A. Chemistry	95	B.A. Music	80
B.A. Communications	90	B.A. Philosophy	91
B.A. Drama	74	B.A. Physics	98
B.A. Economics	58	B.A. Political Science	105
B.A. English	86	B.A. Psychology	107
B.A. French	88	B.A. Sociology	108
B.A. Geography	103	B.A. Spanish	88
B.A. German	88	B.A. Speech	82

The following master's degree programs have also been authorized:

M.B.A. Business Administration	M.A. History
M.A. English	M.A. Social Sciences

Courses of study are organized into six instructional divisions of the College: Business Administration and Economics, Education, Fine and Applied Arts, Humanities, Science and Mathematics, and Social Sciences. These courses are listed below by subject-matter field and instructional divisions:

Courses	Divisions
Accounting	Business Administration and Economics
Anthropology	Social Sciences
Art	Fine and Applied Arts
Art Education	Fine and Applied Arts, Education
Biological Science	Science and Mathematics
Business Education	Business Administration and Economics, Education
Chemistry	Science and Mathematics
Comparative Literature	Humanities
Drama	Fine and Applied Arts
Economics	Business Administration and Economics
Education—Foundations	Education
Education—Elementary	Education
Education—Secondary	Education
Education—School Services	Education
English	Humanities
English Education	Humanities, Education
Finance	Business Administration and Economics
Foreign Languages Education	Humanities, Education
French	Humanities
Geography	Social Sciences
German	Humanities
Health Education	Education
History	Social Sciences
Journalism	Humanities

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Courses	Divisions
Journalism Education	Humanities, Education
Management	Business Administration and Economics
Marketing	Business Administration and Economics
Mathematics	Science and Mathematics
Mathematics Education	Science and Mathematics, Education
Music	Fine and Applied Arts
Music Education	Fine and Applied Arts, Education
Philosophy	Humanities
Physical Education	Education
Physical Science	Science and Mathematics
Physics	Science and Mathematics
Political Science	Social Sciences
Psychology	Social Sciences
Quantitative Methods	Business Administration and Economics
Recreation	Education
Russian	Humanities
Science Education	Science and Mathematics, Education
Social Sciences Education	Social Sciences, Education
Social Welfare	Social Sciences
Sociology	Social Sciences
Spanish	Humanities
Speech	Fine and Applied Arts
Speech Education	Fine and Applied Arts, Education

PREPROFESSIONAL STUDIES

Studies which may qualify students for admission to professional schools in architecture, dentistry, law, medicine, social welfare and theology are available. Interested students are advised to consult the Office of Counseling concerning professional objectives.

DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

Division Chairman	Theodore H. Smith
Department of Accounting and Finance	
Professor	Wiseman (Chairman)
Associate Professors	Kinney, Li
Assistant Professor	Woo
Department of Economics	
Professor	Roberts (Chairman)
Associate Professor	Graves
Assistant Professors	Lafky, Pontney
Department of Management	
Associate Professor	Barres (Chairman), McCloud
Assistant Professors	Biesiot, Ellery
Department of Marketing and Quantitative Methods	
Professors	Roberts, Smith, Tull (Chairman)
Associate Professor	Hussain
Assistant Professor	Fyfe

THE UNDERGRADUATE PROGRAM IN BUSINESS ADMINISTRATION AND ECONOMICS

Through a study of the various theoretical and practical business policies and procedures, the Division of Business Administration and Economics seeks to afford a basic education for managerial and professional positions in business, government, and education. Although emphasis is given to theory, factual content which is essential in specific vocations such as accounting, economics, finance, marketing, management, and business education is provided to enable students to enter apprenticeships in these fields with the expectation that their education should expedite their progress, either to managerial positions or to staff positions as professional accountants, economists, educators, and marketing and business consultants.

In our ever-expanding, complex society, the managers of tomorrow must be men and women with breadth of understanding and vision. Students who concentrate in a special area are encouraged to elect courses in other divisions of the college, particularly in the areas of the behavioral, social, and political sciences, and foreign languages. It is assumed that the first half of their college work toward a bachelor's degree represents a required basic education in communication, mathematics, a laboratory science, social science, and the humanities. With the broadening of our cultural and business horizons, it is desirable to become increasingly better versed in the language of our neighbors, Spanish, and in such languages as French, German, and Russian. Since the understanding of mathematics is becoming increasingly important in business and the social sciences, students who contemplate enrollment in either business administration or economics are encouraged to take four years of high school mathematics. College algebra, or three years of high school mathematics including a second course in algebra, will be a minimum prerequisite for entrance to the program.

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If credits for either or both elementary accounting and principles of economics have not been earned, it will be necessary to enroll in these courses the first semester of the junior year.

Students enrolled in the division and working toward a college degree are subject to the general requirements of the college as to courses and credit hours required for graduation.

BACHELOR OF ARTS DEGREE IN BUSINESS ADMINISTRATION

The degree requirements are as follows:

1. Completion of a minimum of 50 semester credit hours in business administration and economics courses in the Division of Business Administration and Economics, of which 35 semester credit hours must be upper division courses.
2. Completion of at least 15 semester credit hours in the Division of Business Administration and Economics at Orange State College.
3. Completion of the required core courses in the Division of Business Administration and Economics. Students in Business Administration are required to take Mathematics 120 (Finite Mathematics) or equivalent as prerequisite to Quantitative Methods 361.
4. Completion of 12 semester credit hours of required courses in an area of concentration to be selected by the student.
5. Completion of at least 62 semester credit hours in areas other than Business Administration and Economics.
6. Students must attain at least a 2.0 grade point average (C average) in all college work attempted, in all courses taken in the Division of Business Administration and Economics, and in his area of concentration.

CORE: The business administration and economics courses listed below are required of all students majoring in business administration:

Course	Units
Economics 100 American Economic History	3
Economics 200 or 200A-B Principles of Economics	5-6
Accounting 101A-B, or 200 Elementary Accounting	6-5
Finance 330 Business Finance	3
Management 341 Principles of Management	3
Management 346 Business Law	3
Management 449 Business Policies *	3
Marketing 351 Principles of Marketing	3
Quantitative Methods 361 Business and Economic Statistics	3
Total	31-33

* Those students taking Business Economics as their area of concentration will take Econ. 401—Government and Business—in lieu of Mgmt. 449—Business Policies.

AREAS OF CONCENTRATION FOR MAJORS IN BUSINESS ADMINISTRATION

A student in business administration should select an area of concentration by the second semester of the junior year and take the required courses in the area.

Accounting	Units
301A-301B Intermediate Accounting	6
302 Cost Accounting	3

And at least one of the following courses:

303	Governmental Accounting	3
308	Federal Income Tax	3
401	Advanced Accounting	3
402	Auditing	3

Business Economics

302	Intermediate Economic Analysis	3
303	Intermediate Economic Analysis	3
402	Monetary and Fiscal Policy	3
	Management 446 Managerial Economics	3

Finance

324	Money and Banking	3
331	Financial Analysis	3

And at least two of the following courses:

337	Real Estate Finance	3
431	Capital and Money Markets	3
432	Investment Principles and Practices	3
433	Problems in Business Finance	3

Management

342	Production Management	3
343	Personnel Management and Human Relations	3
444	Motion and Time Study	3
446	Managerial Economics	3

Marketing

353	Marketing Administration	3
452	Marketing Research	3
459	Marketing Problems	3

A minimum of one of the following courses:

307	Distribution Costs	3
354	Principles of Advertising	3
355	Credit and Credit Administration	3
356	Creative Motivation	3

Quantitative Methods

362	Introduction to Econometrics	3
461	Advanced Statistics	3
462	Mathematical Models in Business and Economics	3

At least one of the following two courses:

364	Computer Logic and Programming	3
463	Statistical Decision Theory	3

BUSINESS EDUCATION

Students who wish to major in Business Administration in preparation for a career as a secondary school teacher in business subjects must meet the requirements of the Division of Business Administration and Economics and the secondary school teacher education program including the requirements for the proper credential as outlined in the catalog.

The requirements for a major in this area are as follows:

1. The core requirements as set forth for all Business Administration Majors, Page 54;

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2. Twelve hours of advanced work in one of the five areas of concentration:
 - a. Accounting
 - b. Economics
 - c. Finance
 - d. Management
 - e. Marketing
3. A minimum of 7 credit hours of electives which may include secretarial studies; *
4. A maximum of 12 credit hours in the secretarial field (typewriting, shorthand, transcription, filing and office machines) may count toward the degree in Business Administration or Economics.*

Education courses required will be detailed by the Division of Education.

THE MASTER OF BUSINESS ADMINISTRATION DEGREE

Applicants and continuing students should read carefully the general College requirements for "Master's Degree Programs," page 44.

The procedural steps for admission to and the completion of the Master of Business Administration Degree are as follows:

Admission Requirements

Apply for admission to the College in Unclassified Graduate Status and declare as objective a Master of Business Administration. Proof of a degree from an accredited college or university must be supplied. This must be done at the Office of Admissions prior to the dates indicated in the College Calendar.

Prerequisites

Admission to the program requires the completion of the following prerequisites with a grade point average of not less than 2.5.

		Units	
Mathematics	120	Finite Mathematics, or	
Mathematics	250A	Calculus	3
Accounting	300	Accounting Fundamentals	3
Economics	300	Basic Economics	3
Finance	330	Business Finance	3
Management	341	Principles of Management	3
Management	346	Business Law	3
Marketing	351	Principles of Marketing	3
Quantitative Methods	361	Business and Economic Statistics	3
		Total	24

Take the Admission Test for Graduate Study in Business during the first semester of residence or at the earliest possible date. This test is given each year on a specified Saturday in November, February, April and July, and is administered at Orange State College.

Advancement to Classified Graduate Status

Achievement of this status requires the following:

1. Completion of all prerequisites

* Orange State College does not offer work in secretarial training, typewriting, or business machines. Consult the Chairman of the Division of Business Administration and Economics to arrange for transfer of approved courses to satisfy these requirements.

2. Making a satisfactory score in the Admission Test for Graduate Study in Business
3. Have prepared and have approved a program in consultation with an advisor
4. Apply to the Registrar for Classified Graduate Status upon completion of 8 to 12 units of graduate work.
5. Receive approval by the Business Administration and Economics faculty and the coordinator of Graduate Studies.

The Program for the M.B.A. Degree Is Outlined As Follows:

Completion of 30 credit hours in courses approved for Graduate work of which not less than 15 credit hours must be in the 500 course level with an over-all point average of not less than 3.0.

This can be achieved in three ways:

- a. 30 credit hours of course work;
- b. 27 credit hours of course work and an approved project;
- c. 24 credit hours of course work and an approved thesis.

1. Course work required of all candidates for the degree (24 units)

	CURRICULUM	Units
Accounting		
<i>Required</i>		
	405 Industrial Accounting	3
	501 Administrative Accounting	3
<i>Recommended Electives</i>		
	406 Cost Control	3
	407 Integrated Data Processing Systems	3
<i>Other Electives</i>		
	Other 400 level accounting courses	
Economics		
<i>Required</i>		
	403 Comparative Economic System	3
	510 Competition, Monopoly, and Public Policy	3
<i>Recommended Electives</i>		
	511 Economic Problems and Public Policy	3
<i>Other Electives</i>		
	Other 400 level economics courses	
Management		
<i>Required</i>		
	544 Organizational Behavior, Theory, and Administration	3
<i>Recommended Electives</i>		
	442 Labor Law	3
	445 Production Control Analysis	3
	446 Managerial Economics	3
	449 Business Policies	3
<i>Other Electives</i>		
	Other 400 level management courses	

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Marketing

Required

	Units
459 Marketing Problems	3

Recommended Electives

452 Market Research	3
552 Product Planning and Price Policy	3
553 Marketing to Government	3

Other Electives

Other 400 level marketing courses

Finance

Required

532 Corporate Financial Management	3
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Recommended Electives

431 Capital and Money Markets	3
432 Investment Principles and Practices	3

Quantitative Methods

Required

560 Operations Research, or	
463 Statistical Decision Theory	3

Recommended Electives

461 Advanced Statistics	3
462 Mathematical Models in Business and Economics	3

2. Satisfactorily pass a comprehensive examination.
3. Receive the endorsement of the Division Faculty and the College Coordinator of Graduate work.

BACHELOR OF ARTS DEGREE IN ECONOMICS

The economics major is designed to prepare students for positions in business education, and government, and for graduate work in economics and related disciplines.

Required of all students for the degree:

1. Completion of 37 semester credit hours of courses in business administration and economics in the Division of Business Administration and Economics, of which 24 semester credit hours must be in upper division courses.
2. Completion of at least 15 semester hours in the Division of Business Administration and Economics at Orange State College.
3. Completion of the Major course requirements for Economics majors, in the Division of Business Administration and Economics. Students in Economics are required to take Mathematics 120 (Finite Mathematics) or equivalent as prerequisite to Quantitative Methods 361.

4. Completion of at least 62 semester credit hours in areas other than Business Administration and Economics.
5. Students must attain at least 2.0 grade point average (C average) in all college work attempted, in all courses in the Division of Business Administration and Economics.

Business Administration and Economics courses required of all students majoring in economics are listed below:

Lower Division

Course	Units
Economics 100 American Economic History.....	3
Economics 200 or 200A-B Principles of Economics.....	5-6
Accounting 101A-B or 200 Elementary Accounting.....	6-5
Total	13-15

Upper Division

Course	Units
Economics 302 Intermediate Economic Analysis.....	3
Economics 303 Intermediate Economic Analysis.....	3
Economics 324 Money and Banking.....	3
Economics 401 Government and Business.....	3
Economics 402 Monetary and Fiscal Policy.....	3
Quantitative Methods 361 Business and Economic Statistics.....	3
Six hours of electives in the Division of Business Administration and Economics approved by the student's major adviser.....	6
Total	24

MINOR IN ECONOMICS

A minor in Economics may be achieved by taking the following courses:

Economics	Units
100 American Economic History.....	3
200 Principles of Economics.....	5
302 or 303 Intermediate Economic Analysis.....	3
401 or 402 Government and Business or Monetary and Fiscal Policy.....	3
403 Comparative Economic Systems.....	3
Elective.....	3
Total	20

TEACHER EDUCATION CURRICULA

Leading to Certificates

The programs in teacher education operate under policies established by the Teacher Education Committee, a college-wide committee of faculty members. The departments of Elementary and Secondary Education have administrative responsibility for these programs. College Administrative Offices.

DIVISION OF EDUCATION

Division Chairman..... Kenneth R. Doane

Department of Foundations of Education:

Professors..... Bridgman, Doane (Acting Chairman), Ehmann,* Imhoff

Associate Professors..... Fierman, Hill

Department of Elementary Education:

Professor..... Hartsig (Chairman)

Associate Professor..... Croy

Assistant Professors..... Donoghue, Golden, Holmes, Kravitz, Lemmon

Department of Secondary Education:

Professor..... Carr (Chairman)

Assistant Professors..... Cusick, McGarry, Sica

Department of School Services:

Professors..... Allen, Brockmann (Acting Chairman), Denno *

Associate Professors..... Lynn,* Tollefson *

Assistant Professor..... Burke,* Preble

Instructor..... Bristow *

Department of Health Education, Physical Education, and Recreation

Associate Professors..... Omalev, Pastor (Acting Chairman)

Assistant Professor..... Barrett

The courses, programs, and services of the Division are directed toward the following objectives of students:

1. Pre-service teacher education
2. In-service teacher education
3. Professional preparation of administrative and counseling personnel for the public schools
4. The portion of the general education requirements in physical education and health

Instruction concentrates on the central principles of human behavior, human development, human learning, physical activity, the school as a basic institution of our culture, the methods and materials associated with effective teaching, school administration, school counseling, and the current and persistent problems that confront teachers and other professional workers in educational institutions. In addition to using published source materials and attending class sessions for presentations and discussions, many of the Division's courses require field work in schools and other educational agencies.

TEACHER EDUCATION CURRICULA

Leading to Credentials

The programs in teacher education operate under policies established by the Teacher Education Committee, a college-wide committee of faculty members. The Departments of Elementary and Secondary Education have administrative responsi-

* College Administrative Officers.

Orange State College

bility for the respective programs. Details of the programs are provided in special brochures available from the Division of Education or the Credentials Office.

Orange State College offers teacher education curricula leading to the Standard Teaching Credential with Specialization in Elementary School Teaching and with Specialization in Secondary School Teaching. All curricula provide for completing requirements for graduation with the Bachelor of Arts degree at the end of the usual four collegiate years and an additional year of work to satisfy requirements for a teaching credential.

CURRICULUM IN ELEMENTARY SCHOOL TEACHER EDUCATION

This program may be subject to change. Any such changes will be available in later College publications.

The suggested program leading to the recommendation for the Standard Teaching Credential with Specialization in Elementary School Teaching includes the following:

1. A bachelor's degree from an approved institution.
2. A fifth year of college or university postgraduate education taken at the upper division or graduate level. (If the student does not complete all requirements, the credential may be awarded on the basis of partial fulfillment at the end of four or more years of work if he has a bachelor's degree from an approved institution, has an approved major, has completed the student teaching requirement, has an affidavit of a teaching position, and has the acceptance of a proposed program to complete all requirements within the first five years of teaching.)
3. Courses in General Education 51 units

Orange State College general education requirements for the bachelor's degree are listed elsewhere in this catalog. To satisfy credential requirements and to prepare himself to meet professional responsibilities within a five-year program, an elementary school teacher education candidate is advised to give consideration to the following:

Social Science (12 units)

Courses should be selected to provide the student with a broad background in all of the social sciences.

Natural Science (10 units)

Two laboratory science courses should be selected.

Humanities (12 units)

Fine and Applied Arts (9 units)

Speech 101 or 231 (3)

Art 100 (3)

Music 101 (3)

Mathematics 100A or Economics 201 (3 units)

To satisfy requirements for a credential, students must have a course in mathematics.

Health and Physical Education (2 units)

Physical Education 123 ($\frac{1}{2}$) and Physical Education 142 ($\frac{1}{2}$) should be selected for two of the courses to meet this requirement.

Not more than six hours of course work taken to satisfy requirements in general education shall apply toward the fulfillment of the requirements for either a major or a minor.

(NOTE: Graduate students must present 45 units to meet a minimum general education requirement. These units must be in five of the following six areas: (1) Social Sciences, (2) Natural Sciences, (3) Humanities (excluding foreign languages), (4) Fine Arts, (5) Mathematics, and (6) Foreign Languages. The Humanities requirement must include a year of English, and, in addition, the applicant for the credential must demonstrate competence in composition either by passing a course in composition or by passing an examination given by the institution in lieu thereof.)

4. A major consisting of at least 24 semester hours of upper division or graduate level courses. If a *diversified* major (e.g., social science) is elected, at least 24 semester hours of upper division or graduate work must be completed in two or more subjects. Majors must be in subjects and areas normally taught in the public schools. These majors are currently available for this specialization at Orange State College: art, biology, business administration, chemistry, communications with journalism emphasis, drama, economics, English, French, geography, German, history, humanities with comparative literature emphasis, mathematics, music, philosophy, physics, political science, psychology, sociology, Spanish, speech. (Note: the specifications above are state minima, and do not necessarily satisfy requirements for a major for graduation from Orange State College.)
5. A minor consisting of 20 semester hours of work in a single subject. If the candidate's major is *not* in an academic area, the minor must consist of at least 20 semester hours in a single *academic* subject, and at least 12 semester hours of upper division or graduate work must be included. Minors must be in subjects normally taught in public schools. These minors are currently available for this specialization at Orange State College: art, biology, chemistry, communications with journalism emphasis, drama, economics, English, French, geography, German, history, humanities with comparative literature emphasis, mathematics, music, philosophy, physics, political science, sociology, Spanish, speech. (Note: a minor is not required for graduation from Orange State College.)

Units

6. Courses in Allied Studies..... 9

These courses supplement the general education and academic specialization of the elementary school teacher. They are offered by the academic departments as a part of the basic preparation of the teacher.

Engl. Ed. 433. Children's Literature (2 units)

Art 380. Art and Child Development (3 units)

Music 333. Music and Child Development (3 units)

P.E. 432. Teaching Physical Education in the Elementary School
(2 units)

7. Professional education requirements which are currently met by the following program at Orange State College..... 24

Educ. 301. Social, Historical, and Philosophical
Foundations of Education (4 units)

Educ. 311. Psychological Foundations of Education
(4 units)

Orange State College

Educ. 331. Elementary School Principles, Curricula, and Methods (8 units)

Educ. 339. Student Teaching in the Elementary School (8 units)

COMPOSITE LOWER DIVISION, UPPER DIVISION, AND FIFTH YEAR WORK

Lower Division..... 63 units

General Education (45 units)

Courses in the major (12 units)

Courses in Allied Studies (3-6 units)

Electives (0-3 units)

Upper division and fifth year work for students seeking recommendation for the Standard Teaching Credential with Specialization in Elementary School Teaching after five years of pre-service teacher education:

Upper Division..... 61 units

General Education (6 units)

Courses in the major (24 units)

Courses in the minor (8-10 units)

Courses in Allied Studies (3-6 units)

Courses in Professional Education (12 units)

Junior year, Education 311 (4)

Senior year, second semester, Education 331 (8)

Electives (3-8 units)

Fifth Year..... 30 units

Courses in the minor (10-12 units)

Courses in Professional Education (12 units)

First semester, Education 339 (8)

Second semester, Education 301 (4)

Electives (6-8 units)

Upper division and fifth year work for students seeking recommendation for the Standard Teaching Credential with Specialization in Elementary School Teaching on partial fulfillment of requirements:

Upper Division..... 61 units

General Education (6 units)

Courses in the major (24 units)

Courses in Allied Studies (3-6 units)

Courses in Professional Education (20 units)

Junior year, Education 311 (4)

Senior year, first semester, Education 331 (8)

Senior year, second semester, Education 339 (8)

Electives (5-8 units)

Fifth Year..... 30 units

(To be completed during the first five years of teaching)

Courses in the minor (20 units)

Courses in Professional Education (4 units)

Education 301 (4)

Electives (6 units)

CURRENT CURRICULUM IN SECONDARY SCHOOL TEACHER EDUCATION *

Composite Lower Division, Upper Division, and Graduate Work

Courses for Distribution in Liberal Arts..... 50 units

Courses for the Major

Variable, but must include at least 24 upper division and graduate units. At least 6 units in the major must be taken at the post-graduate level. See the appropriate sections of this Catalog for descriptions of requirements in specific majors.

Each student will complete a major planned with and approved by his major adviser and his professional adviser. Majors presently available are: Art, biology, business administration, chemistry, communications with journalism emphasis, drama, economics, English, French, geography, German, history, humanities with comparative literature emphasis, mathematics, music, philosophy, physics, political science, psychology, sociology, Spanish, speech.

Courses for the Minor

Variable, but must include at least 20 units in a single subject. If the major is non-academic, the minor must include at least 12 units of upper division and/or graduate work. See the appropriate sections of this Catalog for descriptions of requirements in specific minors.

Each student will complete a minor planned with and approved by his major adviser and his professional adviser. Minors presently available are: Art, biology, chemistry, communications with journalism emphasis, drama, economics, English, French, geography, German, history, humanities with comparative literature emphasis, mathematics, music, philosophy, physics, political science, sociology, Spanish, speech.

N.B. Requirements specified above for majors and minors are credential minima. College requirements for majors for graduation are generally higher. A minor is not required for graduation from the College, but is required for a credential. Students should select majors and minors carefully. Some majors and minors, though legitimate for graduation, are not practical in terms of job placement, and students with impractical majors and minors will not be admitted to student teaching. If you are in doubt regarding the selection of a major or minor, consult your advisers.

Courses for the Pre-service Professional Education..... 18 units

Elective Courses

These should be sufficient in number to complete the curriculum leading to the Credential.

Total units required for the credential (five years)..... 154

The Bachelor of Arts degree may be conferred at the end of four years if graduation requirements have been satisfied.

N.B. The applicant for the Standard Teaching Credential with specialization in Secondary School Teaching must complete 30 units of upper division and/or graduate work after he has completed all requirements for the bachelor's degree.

* This is the curriculum for the new Standard Teaching Credential with Specialization in Secondary School Teaching. Requirements for the old General Secondary Credential will be found in the 1963-64 Catalog. This program may be subject to changes. Any such changes will be available in later College publications.

THREE-YEAR PROGRAM IN PROFESSIONAL EDUCATION

Professional education requirements for the credential are met through completion of the following program:

Education 300.	Practicum in Secondary Education	1 unit
Education 301.	Social, Historical, and Philosophical Foundations of Education	4 units
Education 311.	Psychological Foundations of Education	4 units
Education 442.	Teaching (Art, English, Music, etc.) in the Secondary School	3 units
Education 549.	Student Teaching in the Secondary School	6 units

(Student teaching credit will be reduced from 8 to 6 units in the fall of 1965).

Students will normally begin their work in professional education in the junior year, and it is expected that, with the exception of Education 301, the courses listed above will be taken in the sequence indicated. Students who begin their work in professional education as seniors or as graduate students will follow a somewhat different sequence, and should consult professional advisers when planning their programs. In all cases, however, students are required to take Education 300 the first semester they are enrolled in professional education.

STATUTORY REQUIREMENTS FOR CREDENTIALS FOR TEACHING

The curricular requirements for credentials for teaching in California elementary schools and secondary schools are included in the above curricula. In addition, an applicant for a credential for teaching is asked questions about his citizenship, and about his ethical and moral character. The applicant must sign an oath of Allegiance, must present a certificate of health from a qualified physician, and present official transcripts of collegiate studies. The applicant must present two sets of personal identification cards, including fingerprints. He must present evidence of having passed a course or suitable examination on the United States Constitution. Each application for a credential must be accompanied with a fee of \$8 in the form of a money order, cashier's check, or certified check.

Students with a bachelor's degree and teaching experience who wish to meet specific requirements for the former General Elementary Credential may do so through the following courses at Orange State College:

Orange State College Courses Which Meet These Requirements

California State Requirements

- | | |
|---|---|
| 1. Principles and Curricula of Elementary Education | Education 331, 431 |
| 2. Elementary methods in basic subjects | Education 331, For. Lang. Ed. 432, Educ. 432R, Eng. Ed. 432, Math. Ed. 432, P.E. 432, Sci. Ed. 432, Soc. Sci. Ed. 432 |
| 3. Child Growth and Development | Education 311, 312 |
| 4. Audio-Visual Education | Education 331, 491 |

PERSONNEL SERVICES FOR TEACHER EDUCATION STUDENTS

Advisement is available to any student seeking a public school credential and a Bachelor of Arts degree. Prior to registration, the student should consult an adviser in the division in which he expects to major and an adviser in the Division of Education who will help him select courses and build his program. A student

from another institution should bring transcripts of previous work and a tentative selection of courses. Each student is responsible for meeting all requirements set forth in the catalog and supplements.

During the student's first semester after matriculation, he will receive from the Office of Admissions an evaluation of his credits which will list the requirements he must meet in earning the credential and the degree he has listed as his objective. If a student changes his degree or credential objective, he must have an evaluation for each new credential. The evaluation will serve as a guide for the student and the advisers in planning a complete program. Any deviation from this evaluation must be approved through written petitions submitted to the Chairman of the Division of Education. Transferred courses must be of upper division level and taken within the past fifteen years to be applicable to upper division credential requirements.*

ADMISSION TO TEACHER EDUCATION

Admission to Orange State College does not constitute admission to the teacher education curricula. To become a candidate for a teaching credential, the student must be matriculated, in good standing, and must file the "Application for Admission to Teacher Education" in the Office of the Division of Education. This application should be filed during the first semester that the student takes courses at the college.

Admission to teacher education is required of all students prior to seeking admission to student teaching.

A faculty committee will review information concerning the applicant's intellectual resources and mastery of important concepts in the common curricular areas of higher education, command of fundamental skills of communication (English language usage, written composition, speech, hearing, reading comprehension, handwriting, mathematical skills), scholarship, personality and character, interest in teaching, and health. Data related to these criteria are gathered from transcripts and records from other schools and colleges, group and individual tests, personality inventories, estimates of the potential of the applicant, and from the Student Health Center. Students should normally qualify for admission and are advised of their status during the second semester of the junior year or their first semester of attendance if they enter with advanced standing with degrees from accredited colleges.

Students who show weaknesses in any of the fundamental skills of communication are advised of their standing. If there are weaknesses in only one or two of the areas noted above, the student will be advised of refresher courses and given a specified time to meet the standard.

If the applicant has serious deficiencies in communication skills or does not meet the standards of mastery in the common curricular areas, personality and character, scholarship, interest in teaching, or health, the faculty committee will deny the applicant admission to teacher education.

The student must arrange to take the required battery of group and individual tests and inventories necessary to provide information needed by the faculty committee. The test of general aptitude is included in the College admissions procedure. The tests of breadth of understanding, reading, English usage, number skills, composition, handwriting, and personality are given by the Testing Office for admission to teacher education; consult the Testing Office for dates.

* Selected courses completed in lower division at institutions outside of the State of California may be applied to professional education credential requirements.

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The Student who comes to OSC to work toward a credential for teaching in a secondary school and who already has a bachelor's degree must, before he is admitted to teacher education, consult with an adviser in the major and must submit a statement, signed by the adviser, which indicates the following:

1. that the student's undergraduate preparation in his major is considered to be adequate for the credential sought, or
2. that the specific courses which the student must complete in order to have a major adequate for the credential sought, and which he must complete before he will be admitted to student teaching. These may be in addition to the minimum of the six upper division or graduate units required in the major in the post graduate year, or may, in part or in whole, satisfy this six unit minimum requirement.

Full details on standards and procedures for admission to teacher education are described in "Instructions and Standards for Admission to Teacher Education" which is available from the Division of Education.

ADMISSION TO STUDENT TEACHING

Admission to teacher education as described above is the first step in a cumulative and continuing evaluation of a candidate's fitness to teach. The applicant for admission to student teaching must have a grade point average of 2.5 in the major, 2.5 in the minor, and 2.5 in professional education. Marks of C, or better, are required in all professional education courses. Applicants for admission to elementary student teaching must be within 15 units of the baccalaureate degree. Applicants for admission to secondary student teaching must be classified as post-graduate students. All applicants must have completed at least twelve units at Orange State College. The applicant must present a favorable report on health status and history. He must present evidence of readiness for student teaching responsibility as testified by the major adviser, the professional adviser, and other college faculty. This evidence relates to scholarship, breadth of understanding, command of the subjects to be taught, fundamental skills of communication, personality and character, interest and potential for teaching, and health.

Competence is required in all subjects and skills for which the candidate is seeking a credential. For the elementary school teacher education student, this includes all subjects and skills commonly taught in the first eight grades of the public schools. Secondary school teacher education students must meet the requirements for their major and minor(s) as specified by the academic divisions.

All instructors of the college are asked to participate in the continuing evaluation of students in relation to those aptitude, personality and character traits which are considered essential to admission to the teaching profession. Dependability in fulfilling assignments, class attendance, ability to get along with people, industry, and emotional stability are representative criteria. In addition to the evaluations by instructors, the applicants may be interviewed by a faculty committee, and attention will be directed to general appearance, dress, vitality, poise, temperament, integrity, and social attitudes.

The application for admission to student teaching is submitted to the Coordinator of Elementary Education or the Coordinator of Secondary Education. The application must be submitted by October 15 or March 1 of the semester preceding the semester in which the student teaching assignment is expected. A faculty committee will gather the information described above and report to the student in time to do planning for the following semester.

Except for graduate students who are in their first semester of study at Orange State College, applications will be accepted only from those who have completed all requirements for admission to teacher education.

Full details on standards and procedures are described in "Instructions and Standards for Admission to Student Teaching" available in the Office of the Division of Education.

STUDENT TEACHING

Each candidate for the Standard Teaching Credential with Specialization in Elementary School Teaching will do his student teaching in the last semester he is in the teacher education curriculum or in his post graduate year at Orange State College. Each candidate for the Standard Teaching Credential with Specialization in Secondary School Teaching will do his student teaching during the post graduate year. Student teaching assignments are made in the elementary and secondary schools of districts geographically accessible to the College. Students will be assigned to work under the supervision of carefully selected supervising teachers; a college supervisor makes frequent visits to the student teacher and the supervising teacher. Student teachers meet in a weekly seminar under the leadership of the college supervisor to discuss performance and problems.

STUDY LIMITS OF STUDENT TEACHERS

Students who enroll in Education 339, Student Teaching in the Elementary School, will be limited to one additional course for that semester. Students who enroll in Education 549, Student Teaching in the Secondary School, will be limited to two additional courses for that semester. It is expected that students will not carry out-of-college work responsibilities during the semester of the student teaching assignment.

If a student is under hardship because of these limitations, he may submit a petition to the Coordinator of Elementary Education or to the Coordinator of Secondary Education, as appropriate, requesting permission to carry not more than 13 units, including student teaching. The petition must set forth, in full, the circumstances necessitating the petition.

PERMISSION TO SUBSTITUTE TEACHING EXPERIENCE FOR STUDENT TEACHING

A candidate for a teaching credential who has had two years of successful, regular teaching experience must petition the Division of Education, through his professional adviser, for permission to substitute such experience for the student teaching requirement. Granting of the petition does not reduce the unit requirement in professional education for the credential involved. Substitution of teaching experience for student teaching will be considered only if the applicant:

1. Has been admitted to teacher education at the college.
2. Has submitted an official verification from his former supervisor, principal, or superintendent to the Division of Education certifying at least two years of successful, regular teaching experience at the appropriate level. A form for this verification is available in the Office of the Division of Education.

PROVISIONAL CREDENTIAL RENEWAL

Orange State College is prepared to cooperate with students seeking renewal of provisional credentials awarded by the State Department of Education. However, a letter of recommendation to the State Department of Education for renewal of

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the provisional credential will be written for the student only if the following conditions have been fulfilled:

1. The applicant has been admitted to teacher education at the college.
2. The applicant has completed the six semester unit requirement established by the State Department of Education at the college.

Detailed statements of requirements for credentials and degrees are available in the Office of the Division of Education.

OTHER CREDENTIAL PROGRAMS

Administration and Supervision

Students must take Education 503, Foundations for Educational Leadership, during their first registration in these fields. To continue in the program beyond this course, the student must be granted a "Letter of Admission to the Program" and possess an official OSC program evaluation. The program is an integrated whole. Thus, students who desire only isolated courses from the program are normally denied admission to such courses. Details of this program are contained in a brochure available from the Division of Education. Students with previous successful administrative experience are exempt from these requirements.

Pupil Personnel Services

Students must take Education 351, Principles of Guidance or Education 452, Counseling Theories and Processes, during their first registration in this field. To take courses beyond these courses, the student must be granted a "Letter of Admission to the Program" and possess an official OSC program evaluation. Details of this program are contained in a brochure available from the Division of Education.

PUBLICATIONS AVAILABLE FROM THE DIVISION OF EDUCATION

1. Principles underlying pre-service teacher education at Orange State College
2. Admission to teacher education—standards, instructions, application
3. Admission to student teaching—standards, instructions, application
4. Program in elementary school teacher education
5. Program in secondary school teacher education
6. Program in school administration and supervision
7. Program in pupil personnel services

DIVISION OF FINE AND APPLIED ARTS

Division Chairman

John W. Olsen

The Division of Fine and Applied Arts includes academic offerings in the Departments of Art, Drama, Music, and Speech. Programs in these disciplines are provided both in breadth and depth; i.e., they are intended both for the major as well as the non-major. The broad areas of Fine and Applied Arts are conceived of as the study of those practical and aesthetic experiences necessary to the education of all persons in our modern society. Persons may elect to take courses leading toward a liberal arts degree, teaching credentials or for professional preparation in art, drama, music, speech, or speech and hearing therapy.

Academic programs in the Division of Fine and Applied Arts include the areas of theory, history, and practice. Departmental majors within the Division are encouraged by this means to become widely acquainted with the broad contributions to society made by their major field, as well as the concentrated application of this area of study. Students are encouraged to stimulate their intellectual curiosity and to synthesize many areas of knowledge by means of careful planning of electives in various subject matter areas. To this end, the major adviser will assist each student in planning his major and minor programs and in the selection of appropriate interdisciplinary course.

MAJOR PROGRAMS

The curriculum in the Division of Fine and Applied Arts enables the college to offer the Bachelor of Arts degree with majors in Art, Drama, Music, and Speech.

Courses leading toward clinical certification by the American Speech and Hearing Association are included in the speech therapy curriculum. Minors are offered in art, drama, music and speech.

DEPARTMENT OF ART

Professors	Olsen (Chairman)
Associate Professors	Dietz, Hein, Smith
Assistant Professors	Kerciui, Samuelson
Instructors	Evjenth

The Department of Art offers a program which includes the several fields of art history, theory, and appreciation, the fine arts (drawing, painting, and sculpture), the applied arts (general and specialized design and crafts), and art education. The broadest objective of the program is to contribute to the intellectual, social, and creative development of the learner as he prepares himself for citizenship in a democratic society. More specifically, the art program provides opportunities for students: (1) to develop a knowledge and understanding of those general principles of visual organization and expression basic to all forms and fields of art; (2) to develop a critical appreciation and understanding of historical and contemporary art forms through a study of these principles as they relate to the range of artistic production of mankind; (3) to use these general principles as a means to express more clearly their ideas, thoughts, and feelings in the creation of visual

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forms; (4) to develop those understandings and skills needed to pursue graduate studies in the field, to teach art in the schools, or to qualify for a position in business and industry as an art specialist.

Undergraduate curricula leading to the Bachelor of Arts degree have been designed to meet the specialized needs of the following groups: (1) students who wish to study art as an essential part of their personal and cultural development; (2) students seeking vocational competence in art; (3) students planning to teach art at the secondary level who wish either a teaching major or minor in art; and (4) students planning to teach in the elementary schools who wish to have art as either an academic major or minor.

To qualify for a baccalaureate degree with a major in art, students must have a C average in all courses required for the degree. No credit toward the major will be allowed for specific major courses in which a grade of D is obtained. As is customary, the Art Department reserves the right to hold projects completed by a student for class credit for a period of three years.

MAJOR IN ART FOR THE BACHELOR OF ARTS DEGREE

Four course programs have been planned to meet the individual needs and interests of students working for the bachelor of arts degree with a major in art.

In the development of specific course offerings which make up these programs, it has been the concern of the art faculty to see that each program contains: (1) basic courses in art history, theory, appreciation, and studio practice which have as their primary focus the study of those general principles of visual organization and expression underlying all fields of art; (2) more specialized courses which provide for adequate preparation in depth in a single field of art. The teaching of art history, theory, and criticism is not confined to those courses bearing that title. Rather, each studio course involves theory as well as the practice of art, includes as part of its content the study and reference to related historical art forms, and has as part of its purpose the development of those critical abilities which are necessary to a valid evaluation and appreciation of the art expressions of man.

Plan I provides for an emphasis in the area of art history, theory, and appreciation and is particularly recommended for those students who wish to pursue graduate studies in art history or museology.

Plan II is designed for those students who prefer a studio-type program with an area of specialization selected from the following: (1) design; (2) crafts; (3) drawing and painting, or (4) sculpture.

Plan III is for those students who wish to meet the requirements of the standard teaching credential with specialization in secondary or junior college teaching; and

Plan IV is for those students who wish to meet the requirements of the standard teaching credential with specialization in elementary teaching.

All four plans require a minimum of 48 units in art or approved related courses with a minimum of 24 units of upper division in art except for Plan IV which requires a minimum of 36 units of art including a minimum of 24 units of upper division in art.

In addition to the requirements listed below for the major, students must meet the other college requirements for a bachelor of arts degree (see page 40). Students following Plans III and IV also must meet any specific requirements for the desired teaching credential (see section in catalog for Division of Education). Graduate students who plan to meet the requirement for a standard teaching credential with specialization in secondary school teaching with a major in art must complete or be enrolled in 6 units in art as approved by the major adviser on and

beyond the specific course requirements listed in Plan III before they can be recommended by the Art Department for student teaching.

Beginning with the fall semester, 1965, students following Plan III will divide their student teaching between two semesters and will register for three units of credit each semester. (See prerequisites and course description for Education 549).

PLAN I: ART HISTORY AND APPRECIATION EMPHASIS

- Lower Division:* Art history and appreciation (9 units); Art Structure (3 units); approved electives (12 units) in: art, anthropology, drama, foreign languages, history, literature, music or philosophy 24 units
- Upper Division:* Art history and appreciation (24 units), including a minimum of 3 units in special studies and coverage of four of the following fields: primitive, classical, medieval, renaissance, baroque, modern, Oriental, American 24 units
- Reading knowledge of one modern foreign language
- Comprehensive examination in art history

PLAN II: STUDIO EMPHASIS

- Lower Division:* Art history and appreciation (9 units); drawing and painting including life drawing (9 units); design and crafts (6 units)..... 24 units
- Upper Division:* Art history and appreciation (6 units); area of specialization (12 units); art electives (6 units) 24 units

**PLAN III: TEACHING EMPHASIS
(Secondary or Junior College)**

- Lower Division:* Same as Plan II above 24 units
- Upper Division:* Contemporary art (3 units); drawing and painting (3 units); display and exhibition design (2 units); crafts (3 units); sculpture or ceramics (3 units); 6 units selected from advertising design, industrial design, costume design, interior design, or fabric design; electives (4 units) 24 units

**PLAN IV: TEACHING EMPHASIS
(Elementary)**

- Lower Division:* Basic course in art history and appreciation, drawing and painting, design, and crafts 12 units
- Upper Division:* Art history and appreciation (6 units); drawing and painting, (3 units); design (3 units); crafts (3 units); electives (9 units) 24 units

MINOR IN ART FOR THE BACHELOR OF ARTS DEGREE

A minimum of 24 units is required for a minor in art for the bachelor of arts degree of which a minimum of 10 units must be in upper division courses. Included in the program must be a basic course in each of the following areas: (1) art history and appreciation; (2) design; (3) drawing and painting; and (4) crafts. Those students planning to qualify for a standard teaching credential with specialization in elementary or secondary teaching and art for a minor must obtain approval from the Art Department for the courses selected to meet the upper division requirements for a minor in art.

DEPARTMENT OF DRAMA

Associate Professor _____ Young (Chairman)
Assistant Professors _____ Brown, Zeltzer

The Department of Drama offers a program which includes the several fields of Theatre History and Theory, Playwriting, Acting-Directing, Technical Theatre, Interpretation, and Radio-Television. The primary purpose of the program is to bring the student into contact with one of man's major cultural institutions, the Theatre, which has been a vital factor in shaping the attitudes, ideas, mores, and points of view of oncoming generations. More specifically, the course work in the drama program provides opportunities for students: (1) to develop an appreciation for the theatre as a cultural heritage of man; (2) to become sensitive and responsive to the theatre experience in contemporary society; (3) to develop the skills and understandings necessary to pursue theatre as a profession; (4) to teach drama and television in the schools; and (5) to pursue graduate studies in drama and television.

Undergraduate curricula leading to the Bachelor of Arts degree have been designed to meet the specialized needs of the following groups: (1) students who wish to participate in drama and television as an essential part of their personal and cultural development; (2) students seeking professional vocational competence in Interpretation, Acting and Directing, Technical Theatre, Radio and Television, or Playwriting; (3) students planning to teach drama and television at the secondary level who wish either a teaching major or minor in drama and television; and (4) students planning to teach in the elementary schools who wish to have drama as either an academic major or minor.

To qualify for a baccalaureate degree with a major in drama, students must have a C average in all courses required for the degree. No credit toward the major will be allowed for required major courses in which a grade of D is obtained.

In addition to specific course requirements, students majoring in drama must participate in a minimum of eight theatre or television productions prior to graduation. The productions chosen for credit will be selected with the aid of the departmental adviser.

MAJOR IN DRAMA FOR THE BACHELOR OF ARTS DEGREE

Four course programs have been planned to meet the individual needs and interests of students working for the bachelor of arts degree with a major in drama.

Plan I is for those students who wish to study drama as a cultural contribution or who wish to pursue graduate degrees in drama with emphasis in theatre history and theory. It is strongly recommended that students electing this plan support the major with approved electives from art, drama, music, foreign languages, literature, philosophy or speech.

Plan II is designed for those students who wish to develop the necessary competence in drama for either pursuing drama as a profession or for pursuing graduate degrees in drama with an emphasis in an area of concentration other than history of the theatre. Areas of concentration are: Playwriting; Acting-Directing; Interpretation; Radio-Television and Technical Theatre.

Plan III is for those students who wish to meet the requirements of the standard teaching credential with specialization in secondary or junior college teaching; and

Plan IV is for those students who wish to meet the requirements of the standard teaching credential with specialization in elementary teaching.

All four plans require a minimum of thirty-six (36) units in drama with a minimum of twenty-four (24) units of upper division in drama. The lower division requirements are the same for all four plans.

In addition to the requirements listed below for the major, students must meet the other college requirements for a bachelor of arts degree (see page 40). Students following Plans III and IV also must meet any specific requirements for the desired teaching credential (see section in catalog for Division of Education). Graduate students who plan to meet the requirements for a standard teaching credential with specialization in secondary teaching and a major in drama must complete or be enrolled in six (6) units in drama as approved by the major adviser on and beyond the specific course requirements listed in Plan III before they can be recommended by the Drama Department for student teaching.

PLAN I: THEATRE HISTORY AND THEORY EMPHASIS

Lower Division: Oral Interpretation (3 units); Acting or Stage Movement (3 units); Technical Theatre (6 units) 12 units

Upper Division: Theatre History and Analysis (12 units); area of concentration other than Theatre History, (6 units); Electives (6 units)..... 24 units

PLAN II: PROFESSIONAL EMPHASIS IN AN AREA OF CONCENTRATION

Lower Division: Same as Plan I.

Upper Division: History of the Theatre (6 units); area of concentration in either Playwriting, Acting-Directing, Interpretation, Radio-Television, or Technical Theatre (12 units); Electives (6 units)..... 24 units

PLAN III: TEACHING EMPHASIS

(Secondary or Junior College)

Lower Division: Same as in Plan I

Upper Division: History of the Theatre (6 units), Acting-Directing (6 units), Technical Theatre (6 units), and Electives (6 units)..... 24 units

PLAN IV: TEACHING EMPHASIS

(Elementary)

Lower Division: Same as in Plan I

Upper Division: History of the Theatre (3 units); Oral Interpretation (3 units); Dramatic Activities for Children (3 units); Reading Theatre (3 units); Dance Theatre (4 units); Radio-Television (3 units); Electives (5 units) 24 units

MINOR IN DRAMA

The minor in drama consists of twenty-four units, fourteen of which must be in upper division. Included in the program must be a basic course in each of the following areas: (1) Oral Interpretation, (2) Stagecraft, (3) Acting, (4) History of the Theatre, and (5) Television. Those students planning to qualify for a standard teaching credential with specialization in secondary teaching and drama for a minor must obtain approval from the Drama Department for the courses selected to meet the upper division requirements for a minor in Drama.

In addition to course requirements, students minoring in drama must participate in a minimum of four theatre or television productions prior to graduation. The productions chosen to meet this requirement are selected with the approval of the departmental adviser.

DEPARTMENT OF MUSIC

Professors: Landon (Chairman)

Associate Professors: Gray, Lewis, Thorsen

Assistant Professors: Michalsky, Nelson

Lecturers in Applied Music (Part-time): Caudill (string bass), Fengler (violin, viola), Glecker (voice), Goodwin (percussion), Hasty (voice), Johnson (baritone, tuba), Kelley (string bass), Lampl (piano), McKenzie (cello), Maury (piano), Muggeridge (oboe), Norman (voice), Peebles (trombone), Pyle (French horn), Remsen (trumpet), Roberts (voice), Schoenfeld, A. (violin, viola), Schoenfeld, E. (cello), Scholtz (oboe), Shaffer (organ), Singer (cello), Wade (flute).

The Department of Music offers courses in music for both majors and non-majors. The fundamental purpose of the music major curriculum leading toward the baccalaureate degree is to provide the necessary training in each of the related aspects of music such as its history and literature, theoretical studies, and musical performance. Such a program of studies is based on the need to provide serious students with a core curriculum which will prepare the individual in such areas as (a) the knowledge of the history and relationships of music as an art form, (b) a comprehensive and analytical understanding of musical literature, (c) a working knowledge of music theory and structure, (d) a high degree of competence in a performing field, and (e) a specialization within the major.

The music program is designed to educate:

1. Students in general, in terms of composite minors, music minors, or broad offerings in the humanities or liberal arts.
2. Students preparing to teach in the elementary and/or secondary schools, with a major field concentration in music (special music teachers).
3. Students preparing to teach in the elementary schools with a major field concentration in music (classroom teachers).
4. Students preparing to teach in the junior colleges and four-year colleges with a major field concentration in music.
5. Students other than music majors preparing to teach as classroom teachers in the elementary schools.
6. Students wishing to prepare for various vocations in music, such as:
 - a. Church music directors and organists
 - b. Teachers of music in private studios
 - c. Music librarians
 - d. Professional performers of music
 - e. Composers and arrangers
 - f. Industrial and recreational music directors

REQUIREMENTS OF THE DEPARTMENT OF MUSIC

1. Entrance examinations in basic piano, voice, theory, and music history will be given all music majors at the time of entrance to Orange State College, and to OSC lower division students prior to acceptance in upper division music-major sequence. These examinations plus auditions in the major performance areas are for placement and to satisfy credential requirements in the minor performance fields. Students who are deficient in any of these areas will be expected to take additional work as suggested by the faculty adviser.

2. Music majors will be expected to declare a principal area of performance with the approval of the Department Chairman and faculty adviser, no later than the beginning of the junior year. It will be expected that each student will prepare for suitable development within this major area of performance, culminating in the successful presentation of a senior recital before he may be approved for graduation. The following steps should be taken as a part of this preparation:
 - a. Declaration of an area of performance concentration (voice, piano, instrument, or combination solo instrument or voice and conducting) at the time of entrance to OSC.
 - b. Demonstration of performance progress before a faculty jury each semester.
 - c. Appearance in at least one minor recital or an assisting performer at least once each semester.
3. All music majors will be required to participate in a music performance group each semester. Instrumental and piano majors are required to take part in small ensembles for a minimum of two semesters in addition.
4. The major area of performance concentration for major in music requires work in applied music, as follows:
 - a. Piano, Voice and Instrumental majors—must complete a minimum of 8 semesters of applied music in the major field of concentration, leading toward the successful presentation of a senior recital in the major performance field.
 - b. Choral or Instrumental Conducting majors—must complete a minimum of 8 semesters of applied music in the major field of performance concentration, in addition to a minimum of 6 units in conducting, leading toward the successful presentation of a joint recital in the major performing field and/or a conducting recital.
 - c. A credential proficiency examination in both piano and voice must be satisfactorily passed before music majors may begin student teaching. These tests are usually given at the end of the junior year.
5. Senior transfer students entering Orange State College with a major in music, or graduate students in music entering to complete credential requirements will be expected to complete a minimum of one semester of successful upper division work in music before they may be approved for directed teaching. Required courses and competencies expected of all OSC music majors must be satisfied prior to endorsement by the faculty committee for acceptance in the credential program.
6. All music majors will be expected to attend a weekly departmental organization class (MU 400) each semester of enrollment.

FEES FOR APPLIED MUSIC

Applied Music (private instruction in voice or major instrument), per lesson \$1.00-\$6.00.

Studio fee, including 16 half-hour lessons and examination, per semester \$70.00-\$96.00.

MUSIC DEGREE PROGRAMS

The Department of Music, Orange State College offers a variety of courses and programs leading to baccalaureate and graduate degrees in teaching and the professions. These degrees may be earned in one of three degree patterns; i.e., specializations in elementary or secondary music teaching or for non-credential objectives. It is possible to elect suitable concentrations within these specializations in such areas as composition, conducting, vocal or instrumental music.

Advanced study through upper-division and graduate courses is offered in many fields of music. Although the masters degree program is not yet available it is anticipated that several of these courses soon will be applicable for graduate degree preparation.

BACHELOR OF ARTS IN MUSIC (Non-Teaching Objectives)

The program of studies leading toward the B.A. in music is designed to provide suitable preparation in such professional areas as (1) theory and composition, (2) performance, (3) non-teaching professions in music, (4) musicology, and (5) advanced degrees in music. The music major, professional degree program shall consist of no fewer than 60 semester units, of which at least 36 shall be in the upper division. In addition, students are required to take MU. 151A,B or the equivalent as partial fulfillment of the general education requirement in Fine and Applied Arts. The following minimum requirements are basic to this degree objective.

Lower Division

	Units
<i>Theory of Music</i> (including musicianship, sight-singing, dictation, diatonic and chromatic harmony and keyboard)	12
<i>Applied Techniques</i> (including ensemble, principal instrument or voice, basic piano and voice)	12
Total, Lower Division	24

Upper Division

<i>Theory of Music</i> (including counterpoint, composition, analytic techniques and orchestration)	8
Music History and Literature	4
<i>Applied Techniques</i> (including ensemble, principal instrument or voice)	8
<i>Specialization in the Major</i> (courses required for area of specialization, to include composition, conducting, instrumental techniques, music education and theory)	14
Electives, music	2
Total, Upper Division	36
Total Units, Lower-Upper Division	60

Note: All candidates for the B.A. Degree with the music major must complete specific requirements for the area of performance concentration in addition to the core of studies indicated above.

**RECOMMENDED PROGRAM OF STUDIES FOR THE BACHELOR OF ARTS
IN MUSIC (MUSIC EDUCATION SPECIALIZATION)**

**Five-year Program Leading Toward the Standard Teaching
Credential, Secondary Specialization.**

Refer to credential requirements, Division of Education, 1964-65 Catalog.

In addition to the major field requirements, candidates for the standard teaching credential with specialization in secondary school teaching must complete a minimum of 20 units in another field for a liberal arts or academic minor. Courses in the major may be distributed to include the fifth year in order that the student may complete all requirements for general education, the academic minor and professional education (except Ed. 549 and Ed. 501) by the end of the fourth year and prior to beginning student teaching.

The following is an example of a modified program for the secondary credential:

Lower Division

Freshman Year:

Mu 111A,B Music Theory	6 units
Mu 151A,B Survey of Musical Literature	4 units
Mu 161 Performance Ensemble	2 units
Mu 170-176 Principal Instrument or Voice	2 units
Mu 182A,B Piano Class for Mus. Majors	2 units
College requirements, including general education	16 units
Total	32 units

Sophomore Year:

Mu 211A,B Music Theory	6 units
Mu 161 Performance Ensemble	2 units
Mu 170-176 Principal Instrument or Voice	2 units
Mu 183A,B Voice, Class for Mus. Majors	2 units
College requirements, including general education	20 units
Total	32 units

Pass Proficiency Examination in (1) Theory, (2) History and Literature, (3) Piano, (4) Voice, (5) Principal Instrument or Voice.

Upper Division

Junior Year:

General Education (to complete 50)	5-10 units
Academic Minor (to complete 20 minimum)	5-10 units
Professional Education (Ed. 300 and Ed. 301)	5 units
Music Courses, to include:	
Mu 312A Counterpoint	2 units
Mu 321A Form and Analysis	2 units
Mu 322A Composition	2 units
Mu 351A,B Music History and Literature	6 units
Mu 361 Performance Ensemble	2 units
Mu 371-376 Principal Instrument or Voice	2 units
Mu 381A,B Orchestral Instruments	2-4 units
Mu 391A,B Choral Conducting	4 units
Total	34 units

Orange State College

Senior Year:

General Education (to complete 50)	5-10 units
Academic Minor (to complete 20 minimum)	5-10 units
Professional Education, to include:	
Ed 311 Psychological Foundations	4 units
Music Education, to include:	
Mu Ed. 441 Teaching Music Theory and Appreciation in the Public Schools	2-3* units
Mu Ed. 442 Teaching Vocal Music in the Public Schools	2-3* units
Mu Ed. 443 Teaching Instrumental Music in the Public Schools	2-3* units
} 7 units	
Music Courses, to include:	
Music Theory Electives	2 units
MU 361 Performance Ensemble	2 units
MU 370-378 Principal Instrument or Voice	2 units
MU 381c, d Orchestral Instruments	2-4 units
MU 392A Instrumental Conducting	2 units
Approved Music Electives	3 units
MU 498 Senior Recital	
} 13-3 units	
Total	34 units

Postgraduate Year:

Professional Education, to include:	
Ed 549 Student Teaching	8 units
Ed 501 Philosophy of Education	2 units
} 10 units	
Music Courses, to include:	
MU 361 Performance Ensemble	2 units
MU 370-378 Principal Instrument or Voice	2 units
Approved Music Electives	2 units
} 22 units	
Courses to complete major or toward higher degree specializations	16 units
Total	32 units

BACHELOR OF ARTS, WITH CONCENTRATION IN MUSIC (FOR ELEMENTARY CLASSROOM TEACHERS)

This degree program is designed for persons interested in a non-professional liberal arts emphasis in music. It is a suitable concentration for persons preparing as general elementary classroom teachers. It should be emphasized that this degree program is *not* designed for the music specialist in public schools, nor does it prepare for advanced degrees in music or for most music professions. This major consists of no fewer than 36 semester units, of which at least 24 units must be taken in the upper division. In addition, students are required to take Mu. 100 or 151A,B or the equivalent as partial fulfillment of the general education requirement in Fine and Applied Arts. The following distribution of subject matter and competencies shall be considered to be the core of this major:

* Students without teaching experience must register for three units credit in one of the following: MU 441, 442, or 443.

Lower Division

<i>Theory of Music</i>	Units
(including music fundamentals, musicianship, sight-singing, dictation, and harmony)	8-9
<i>Applied Techniques</i>	
(including ensemble, principal instrument or voice, basic piano and voice)	3-4
Total, Lower Division	12

Upper Division

Theory of Music	2-4
Music History and Literature	4
<i>Applied Techniques</i> *	
(including ensemble, orchestral instruments, conducting, piano and voice)	16
Total, Upper Division	24
Total Units, Lower-Upper Division	36

MINOR IN MUSIC

The Minor in Music may be used as an appropriate area of study by persons whose majors are in other fields, or may be used to satisfy minor field requirements for elementary or secondary teaching credentials. A maximum of 12 units from the lower division may be included in work counted toward the music minor. The music minor requires a minimum preparation of 20 units.

Composite of Lower Division and Upper Division

<i>Theory of Music</i>	Units
(Selected from MU 101, 111A,B, 211A,B or any 300 or 400 level theory classes for which student is qualified)	6
Music History and Literature (MU 100, 151A,B, 350 or courses at the 300 or 400 level for which student is qualified)	4-6
<i>Applied Techniques</i>	
(Including ensemble, conducting, piano or voice, orchestral instruments, and principal instrument or voice)	8-10

Note: Students expecting to use the minor for teaching must complete MU 181a-d and/or 381a-d, Orchestral Instruments (4 units) and a minimum of two units in an ensemble appropriate to their area of specialization.

Total Units	20
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DEPARTMENT OF SPEECH

Professors	Fessenden (Chairman)
Associate Professors	Breinolt, Long **
Assistant Professors	Granell
Instructors	Good

* General elementary credential candidates must take a minimum of 2 units each of piano and voice (non-principal) and pass satisfactorily the junior level proficiency in each.
 ** College Administrative Officer.

Orange State College

Course work in the Department of Speech is directed toward four goals: (1) to provide an understanding and appreciation of the importance of oral communication in our society; (2) to provide professional training in such areas as teaching, business, law, and others where the ability to speak well and to communicate effectively is basic; (3) to prepare specialists in public address and speech therapy and audiology; and (4) to correlate such activities as intercollegiate forensics and school and community clinic experiences with the theory, principle, and history taught in the courses in the areas of rhetoric and speech therapy and audiology.

MAJOR IN SPEECH FOR THE BACHELOR OF ARTS DEGREE

Four course programs have been planned to meet the individual needs and interests of students working toward the bachelor of arts degree with a major in speech and for a teaching credential with specialization in elementary, secondary, or to serve as a teacher of exceptional children in the area of the speech and hearing handicapped.

Plan I provides for emphasis in rhetoric and public address and is particularly recommended for students who plan to pursue graduate study in this area.

Plan II is designed for students who wish to work toward a teaching major in speech with specialization in secondary schools.

Plan III is planned for students who wish to work toward a major in speech with specialization in elementary schools.

Plan IV is designed to provide the student with specialized preparation to serve as a teacher of exceptional children in the area of the speech and hearing handicapped. This program leads toward fulfilling the requirements for certification in the American Speech and Hearing Association and the California State Credential.

In addition to the course requirements listed in Plans II, III, and IV, students must meet the other college requirements for the bachelor of arts degree.

Students following Plans II and III must also meet the specific requirements for the desired teaching credential. Post-graduate course work required for the credential should be selected in conference with a departmental advisor.

Students following Plan III should consult with their departmental advisors if they plan to pursue graduate work in the field of speech. The required courses are selected to provide the elementary teacher with the most appropriate speech and drama background for his teaching. To avoid having the degree be terminal at the bachelor of arts level, the electives need to be selected with a specialized goal in mind.

Students following Plan IV should consult with their departmental advisor regarding the substitution of methods and student teaching in correction for the standard teaching credential requirements. They need also to consult regarding the required courses in Education.

PLAN I: BACHELOR OF ARTS MAJOR IN SPEECH

Lower Division: Speech 202, Speech 211, Speech 231A or equivalents; approved electives in speech or a related field to a total of 12 units

Upper Division: Speech 311, Speech 334, Speech 335, Speech 403, Speech 404, Speech 434, Speech 436, Speech 490, and approved electives 24 units

PLAN II: SPEECH TEACHING EMPHASIS
(Secondary)

Lower Division: Same as Plan I 12 units

Upper Division: Same as Plan I plus Speech 338 (if Speech 138 was not taken in lower division) and Speech 424 24 units

Speech Ed. 442 will normally be taken the first semester of the post-graduate year.

PLAN III: ELEMENTARY TEACHING—SPEECH EMPHASIS

Lower Division: Same as Plan I 12 units

Upper Division: Speech 301, Speech 311 or Drama 314, Speech 334, Speech 403, Speech 404, and approved electives 24 units

PLAN IV: SPECIALIZED PREPARATION TO SERVE AS A TEACHER OF EXCEPTIONAL CHILDREN IN THE AREA OF THE SPEECH AND HEARING HANDICAPPED

Lower Division: Same as Plan I 12 units

Upper Division: Speech 341, Speech 351, Speech 403, Speech 404, Speech 441, Speech 443, Speech 451, Speech 452, Speech 458, Speech 461, Speech 490 30 units

Post-Graduate year: Speech 458, Speech Ed. 459, Speech 462, Speech 463, and Speech 557 (4 units) 15 units

MINOR IN SPEECH

The minor in Speech is twenty units of approved course work. Eight units may be in the lower division and normally are the same as those required for the major: Speech 202, Speech 211, and 231A or their equivalents. Twelve units must be in the upper division level and should be chosen in consultation with a departmental advisor. In general, the student seeking speech as a minor in the elementary Program will be recommended to include Speech 301 and Speech 403; the student seeking to teach speech on the secondary level will be recommended to include Speech 334 and Speech 335. The six units of electives will be determined according to the student's major interests and goal.

Minor in Philosophy

The instructional program of the Division is strengthened by the Humanities Series of visiting lecturers, rapidly expanding library resources, and a divisional collection of literary recordings.

(The Department of Foreign Languages and Literatures publishes *Abstracts*, a quarterly of authoritative résumé relevant to the teaching of Modern Languages.)

COMPARATIVE LITERATURE

The program in Comparative Literature is governed jointly by the Departments of English and of Foreign Languages and Literatures, with the chairman of the Humanities Division acting as chairman of the program.

The program in Comparative Literature provides courses in the study of various national literatures from the earliest times to the present, with special emphasis on the manifold interrelations of literatures, in theory, genres, ideas, movements, and authors. Works are read in English translation and the courses conducted in English. For students whose major concentration is not in Comparative Literature, the knowledge of a second language is not required.

DIVISION OF HUMANITIES

Division Chairman: Gerhard G. Friedrich

The Division of Humanities includes the departments of English, Foreign Languages and Literatures, Journalism, Philosophy, and an inter-departmental program in Comparative Literature. The Humanities faculty is therefore concerned with the teaching of various languages and effective communication, critical appreciation of man's imaginative achievements, and the exploration of ideas and values.

The offerings in the Humanities contribute significantly to a general, liberal education, in addition to preparing for the teaching profession, graduate study, and other occupational pursuits.

The Humanities recognize that to be humane is at once the most difficult and the most precious achievement of man. It requires not only an understanding of the things that are, but a vision of things that ought to be. So conceived, humanistic studies attempt to develop an enlarged sensibility as to the possibilities of human experience.

At present the following majors and minors are offered:

Major in Communication: News Communication (Journalism) Emphasis

Minor in Communication: News Communication (Journalism) Emphasis

Major in English

Minor in English

Master of Arts in English

Majors in French, German, and Spanish

Minors in French, German, and Spanish

Major in Humanities: Comparative Literature Emphasis

Minor in Humanities: Comparative Literature Emphasis

Major in Philosophy

Minor in Philosophy

The instructional program of the Division is strengthened by the Humanities Series of visiting lecturers, rapidly expanding library resources, and a divisional collection of literary recordings.

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Orange State College

BACHELOR OF ARTS DEGREE

HUMANITIES MAJOR: COMPARATIVE LITERATURE EMPHASIS

Requirements: A combined total of 36 units beyond General Education requirements as follows:

1. Proficiency in at least one foreign language; this requirement may be satisfied by completing with a grade of B or better the fundamental and intermediate language courses, or by examination.
2. A combined minimum of 15 units in English and Foreign Languages and Literatures.
3. A minimum of 15 units from the Comparative Literature offerings.
4. Electives: 6 units on advisement.

MINOR IN COMPARATIVE LITERATURE

Requirements: A combined total of 21 units, as follows: a maximum of 9 lower division units plus a minimum of 12 upper division units.

DEPARTMENT OF ENGLISH

Professors: Friedrich (Chairman), Ramsay

Associate Professors: Cummings, Jones, Obler, Schneider

Assistant Professors: Austin, Brunelle, Greenwood, McNelly, Salz, Scott, Stuart

The study of "English" emphasizes the nature and development of our language, the craft of writing, and the imaginative literature of American and British authors—prose fiction, poetry, and drama. Except for the required Freshmen English offerings courses in world literature in English translation are listed separately, under Comparative Literature. In addition, the Department of English offers some specialized professional courses. On the senior and graduate levels, various opportunities are provided for seminar work and independent study.

English 101 and 102 or their equivalents or the consent of the instructor is a prerequisite to all English and Comparative Literature courses numbered 200 and above.

BACHELOR OF ARTS DEGREE: ENGLISH MAJOR

Requirements: A total of 36 units beyond General Education requirements, with the following distribution:

Lower Division—Maximum of 9 units, including:

221, 222. American Literature (6 units)

Lower Division elective (3 units)

Note: Students planning to transfer into the program at the beginning of the junior year, after taking their lower division work elsewhere, are advised to take freshman and sophomore courses as nearly equivalent as possible to the requirements listed above.

Upper Division (Minimum of 27 units)

Language and Composition (Minimum of 3 units), selected from the following:

301. Advanced Composition

303. The Structure of Modern English

490. History of the English Language

Major Author Courses (9 units)

- 333. Chaucer
- 334. Shakespeare
- 341. Milton and the Seventeenth Century

Period Courses (Minimum of 6 units, at least 3 in a period preceding the modern), selected from the following:

- 335. Elizabethan Drama
- 336. Elizabethan Poetry and Prose
- 342. The Age of Reason in English Literature
- 343. The Romantic Movement in English Literature
- 344. Literature of the Victorian Period
- 345. History and Development of the English Novel
- 462. Modern British and American Novels
- 464. Modern British and American Drama
- 466. Modern British and American Poetry

Electives (Minimum of 9 units), selected from additional courses in language and composition, period courses, literary criticism, senior seminars, and Comparative Literature. Attention is directed to the fact that Comparative Literature offerings are listed separately, but count toward an English major.

A program of literary studies gains in perspective through the study of history, sociology, philosophy, and psychology. These fields offer vital lifelines which nourish and deepen understanding of literature. Students of literature are strongly advised to include such courses in their program, particularly in the areas of philosophy and psychology.

English majors who intend to pursue graduate study are urged to acquire proficiency in at least one foreign language. Note: Orange State College freshmen intending to major in English should complete two years of course work in a foreign language, or demonstrate equivalent accomplishment by transfer or by examination.

TEACHING CREDENTIAL REQUIREMENTS

English majors who are also candidates for a teaching credential must take the required professional education courses in English in addition to fulfilling all requirements for the major indicated above.

MINOR IN ENGLISH

Requirements: A total of 21 units.

Lower Division (Maximum of 9 units), including:

- 221, 222. American Literature, or the equivalent.
- Lower Division electives (3 units)

Upper Division (Minimum of 12 units), including:

- Language and Composition (Minimum of 3 units), selected from the following:
 - 301. Advanced Composition
 - 303. The Structure of Modern English
 - 490. History of the English Language

Major Author Courses (Minimum of 6 units)

- 334. Shakespeare
- 333, Chaucer, or 341, Milton and the Seventeenth Century
- Electives (Minimum of 3 units)

MINOR IN COMPARATIVE LITERATURE

The degree of Master of Arts in English requires completion of a minimum of 30 semester units beyond the bachelor's degree. Candidates having fewer than 36 units of undergraduate English normally will be required to take several additional courses to build a full undergraduate major. The 30 units in the graduate program are distributed as follows:

Minimum units in courses restricted to graduate students (500 series).....	15
Maximum units in specialized upper division courses in English.....	9
Units in subjects related to English.....	6
Minimum Total	30

Up to 6 units of the graduate course work may be in independent study. Three of these units may be devoted to a thesis or other written reports and articles, individually supervised by a faculty member.

The candidate for the Master of Arts degree in English must see a graduate advisor before beginning his program. At that time the particular courses which will comprise his prerequisite 36 units will be selected. All candidates must take a graduate course in the English language, in Shakespeare, and in at least one other major literary figure studied in depth. In addition he must take the Graduate Record Examination (Aptitude and Advanced Test in Literature) prior to his admission to Classified Graduate status.*

DEPARTMENT OF FOREIGN LANGUAGES AND LITERATURES

Associate Professors	Kline, Mathieu (Chairman)
Assistant Professor	Shapley
Instructor	Peña

The program of the Department of Foreign Languages and Literatures is designed to meet the needs of several types of students, including those who seek a liberal arts education with an emphasis on a foreign language and its literature; those who intend to teach at the elementary, secondary, or college level; those who plan to use foreign languages in professional careers; or those who desire to pursue graduate studies. The program emphasizes high standards of achievement in the practical use of the language, in the study of its literature and its culture, in the mastery of applied linguistics, and in methodology of teaching, the latter acquired in part through apprenticeship.

A student may enroll at any point in the sequence of courses for which his previous study has prepared him.

MAJOR IN A SINGLE FOREIGN LANGUAGE

Three options are offered: French, German or Spanish.

Requirements: Courses 101, 102, 203, 204, or their equivalents, completed satisfactorily; plus 24 units in upper division courses, including 317 (or equivalent), 351, 361, 451, 461, except that six of these units may be in another field selected with the approval of the advisor, including 6 lower division units in a third language.

Attention is directed to the courses in foreign literatures in translation listed elsewhere in this catalog under Comparative Literature.

* See general college requirements, pp. 44-47.

MAJOR IN TWO FOREIGN LANGUAGES

Two options are offered: Romance Languages Major (French and Spanish) and Germanic-Romance Languages Major (German and French or Spanish). A student electing the double major must fulfill all requirements for a Major in a Single Language and, in addition, the requirements for a Minor in Single Language.

MINOR IN A SINGLE LANGUAGE

Requirements: Courses 101, 102, 203, 204, or their equivalents, completed satisfactorily; plus 9 units in upper division courses selected in consultation with the advisor.

CREDENTIAL PROGRAMS

GENERAL ELEMENTARY CREDENTIAL

Students who are candidates for the General Elementary Credential must also complete the professional requirements, including Foreign Languages Education 432.

GENERAL SECONDARY CREDENTIAL

The credential program is the same as for the liberal arts major, with the following additional requirements:

Foreign Languages Education 442;
French or German or Spanish Applied Linguistics 466;

plus 6 units in the Major language selected with the approval of the advisor and taken in the senior year or thereafter at the 400 and 500 level.

THE LANGUAGE LABORATORY

Students enrolling in courses 101, 102, 203, 204 are required, in addition to the regular class periods, to practice for the minimum of prescribed time in the Language Laboratory. The 30-station laboratory operates like a library; students may use it at a time most convenient to them, preferably every day in sessions of 15 to 30 minutes. Further details will be announced by each instructor and by the Supervisor of the Language Laboratory.

DEPARTMENT OF JOURNALISM

Professor _____ Maxwell (chairman)
Assistant Professors _____ Alexander, Johnson,* Smythe

The program of the Department of Journalism serves students with interests in mass communication by offering a curriculum integrating the liberal arts and professional courses in media techniques.

The department offers a major in Communication with a News Communication (Journalism) emphasis, and is developing additional communications emphases in Advertising, Public Relations, Photocommunication, and Telecommunication. A number of courses are now offered in these developing emphases.

The Communication major helps to prepare those desiring various careers related to mass communication—careers that may involve newspapers and magazines, television and radio, advertising, public relations, photography, industrial or governmental communications, and teaching. Communication courses will also benefit those who wish only a better understanding of the functions of the mass media in a democratic society.

* College Administrative Officer.

BACHELOR OF ARTS DEGREE

Communication Major: News Communication (Journalism) Emphasis

Requirements: A combined total of 48 units—36 within the Journalism Department and 12 in other departments, as follows:

Academic Core (36 units)

- Journalism 101, News Writing (3)
- Journalism 102, News Writing (3)
- Journalism 333, Mass Communication in Modern Society (3)
- Journalism 334, Feature Article Writing (3)
- Journalism 335, Reporting of Public Affairs (3)
- Journalism 425, History and Philosophy of American Mass Communication (3)
- Journalism 426, World Press and Propaganda Analysis (3)
- Journalism 427, Seminar on Current Issues in Mass Communication (3)
- † Economics 201, The American Economy (3)
- † English 462, Modern British and American Novels (3)
- † History 476, United States Since 1933 (3)
- † Psychology 351, Social Psychology (3)

News Communication Emphasis (12)

- Journalism 318AB, Press Photography (2, 2)
- Journalism 332, Copy Editing and Makeup (3)
- Journalism 338, Newspaper Production (3)
- Journalism 439, Mass Media Internship (2)

MINOR IN COMMUNICATION

Requirements: A combined total of 21 units, as follows:

Lower Division (Maximum of 7)

- Journalism 101 or 102 (3)
- Journalism 218AB (2,2)

Upper Division (Minimum of 14 units)

Journalism 331 or equivalent

At least five units from the following: Journalism 332, Journalism 338AB, Journalism 358AB, or Journalism 448.

At least six units from the following: Journalism 333, Journalism 425, Journalism 426, or Journalism 427.

If Journalism 218AB is not completed as a lower division requirement then 318AB must be completed as an upper division requirement.

Electives approved by the advisor to complete the 21 units requirement.

TEACHING CREDENTIAL REQUIREMENTS

Communication majors with News Communication (Journalism) emphasis who plan to offer journalism as their major subject for a teaching credential must have their minor approved by the chairman of the Journalism Department and must complete the required professional education courses in addition to their major and minor requirements.

† Some flexibility may be permitted as to major requirements in economics, English, history and psychology, depending on the student's preparation in these areas.

FOREIGN LANGUAGE RECOMMENDATION

Majors who are planning careers in news communication are strongly urged to acquire proficiency in a foreign language.

DEPARTMENT OF PHILOSOPHY

Professor _____ Alamshah (Chairman)
Associate Professor _____ Becker*
Assistant Professor _____ Ahumada

The aim of the department of philosophy is twofold: (1) to present curricular offerings in a manner that will awaken an appreciation for philosophical concerns; delineate the significant contributions made to the history of ideas by the great philosophers; and develop in those who concentrate in the field an appreciable degree of precision in communicating the subject matter of philosophy; (2) to draw attention to the significance of philosophical analysis in areas of vital concern for the life of society.

Course work in philosophy, therefore, has the following objectives:
to help students understand their own philosophical concerns;
to uncover and to delineate sound methodology for the clarification of philosophical problems; and
to prepare students who are seeking higher degrees in philosophy.

BACHELOR OF ARTS DEGREE: PHILOSOPHY MAJOR

Requirements: A total of 36 units, beyond General Education requirements, with the following distribution:

Lower Division (Maximum of 12 units, beyond General Education requirements)

- 110. Comparative Study of the World's Great Religions (3)
- 210. Logic (3)
- 211. The Older Schools of Philosophy (3)
- 212. The Modern Schools of Philosophy (3)

Note: Students who have taken their lower division work elsewhere will be given credit for equivalent course work.

Upper Division (Minimum of 24 units)

Core Requirements (15 units)

- 331. History of Philosophy: Problems of Being and Becoming (3)
- 332. History of Philosophy: Problems of Knowledge and Valuing (3)

Plus choice of one of the following:

- 417A, 417B. Aristotle (6)
- 427A, 427B. Spinoza (6)
- 447A, 447B. Plato (6)
- 467A, 467B. Kant (6)
- 499. Independent Study (3)

Electives (Minimum of 9 units)

A program in philosophy profits greatly through the study of literary masterpieces, psychology, and the social sciences. Students of philosophy are advised to supplement their studies in philosophy with course work offered in these fields. Philosophy majors are urged to acquire proficiency in a foreign language.

* College Administrative Officer.

MINOR IN PHILOSOPHY

Requirements: A total of 21 units (beyond General Education requirements).

Lower Division (Maximum of 9 units), selected from:

- 110. Comparative Study of the World's Great Religions (3)
- 210. Logic (3)
- 211. The Older Schools of Philosophy (3)
- 212. The Modern Schools of Philosophy (3)

Upper Division (Minimum of 12 units)

- 331. History of Philosophy: Problems of Being and Becoming (3)
- 332. History of Philosophy: Problems of Knowledge and Valuing (3)
- Electives (6 units)

DIVISION OF SCIENCE AND MATHEMATICS

Division Chairman _____ Miles D. McCarthy

The Division provides fundamental instruction basic to the needs of students preparing (1) to pursue graduate and professional training, (2) to teach, and (3) to seek employment in technical and applied fields.

Students preparing for careers in the health sciences should register with the Chairman of the Pre-medical Committee (membership listed on page 17). The committee will advise students concerning appropriate collegiate majors, pre-professional requirements, and aptitude tests, and professional school admissions procedures.

It is the concern of the faculty that science instruction shall not be circumscribed by limited disciplines, but shall embrace related scientific subject-matter fields as well as liberal arts subjects and foreign language. We hold firmly to the conviction that the trained scientist of today and in the future must be one conversant with the general principles of all scientific disciplines and one adequately prepared in depth in a major field. He must be one who has been nurtured in the development of ideas, not merely in technical skills.

To qualify for a baccalaureate degree in science or mathematics major programs, students must have a C average in all courses required for the majors including those in the related sciences. A proficiency in one modern foreign language (Russian, German, French) is required. A reading comprehension of a second modern foreign language is strongly recommended for students planning graduate study leading to the Ph.D. degree. This requirement is normally met by completing four semesters of a college foreign language with a C grade or better or by taking a foreign language for two years in high school and two semesters of intermediate language in college with a minimum of a C grade in the college course. The requirement may also be met by examination upon approval by the appropriate department chairman. Examinations will be given in October and March of each academic year. For details of examination procedure, apply at Division Office.

No credit toward the major will be allowed for specific major courses in which a grade D is obtained. A placement test will be given to students in the division of science in order to determine whether they are ready to start the calculus.

Non-science major students admitted to the College directly from high school or transfer students with 30 units or less will normally expect to satisfy the college general education natural science requirements for the B.A. degree by completing the following courses:

Physical Science 201	4 units	4
Biology 100	2 units	2
Biology 140	3 units	3
or		
Biology 160	3 units	—
Total		9

DEPARTMENT OF BIOLOGICAL SCIENCE

Professors _____ McCarthy (Chairman), McCleary, Sutton
 Associate Professors _____ Brattstrom, Turner
 Assistant Professors _____ P. Adams, Rudersdorf, Walkington

The Department of Biology offers a program leading to the Bachelor of Arts degree in Biology for students preparing to enter graduate and professional schools, for those preparing to teach, and for those preparing for careers in industry and government service.

It is the conviction of the faculty in Biology that the purposes of all these students can best be served by building their curricula on a core of courses fundamental to the science of biology. This core curriculum includes biological principles, genetics, microbiology, and physiology.

In considering the curricula beyond this core of subjects, the faculty in Biology has agreed that the interests and goals of individual students can best be satisfied through individual counseling rather than through prescribed programs. After discussion with their advisors, students will elect those upper division courses which will satisfy their individual interests and professional goals. Eight units of electives must be in one area of interest (e.g., biology, botany, microbiology, or zoology) and four units in another area.

Advanced students will be permitted to enroll in Biological Science 400, Undergraduate Problems in Biology. All upper division students are expected to attend the departmental seminars.

The Department of Biology also offers a curriculum for students majoring in other fields who wish to minor in Biology.

BACHELOR OF ARTS DEGREE IN BIOLOGICAL SCIENCE

One hundred twenty-four units including general education (See page 41), foreign language * (See divisional requirement page 93), 33 units in biology courses, and supporting courses in physical sciences and mathematics. The supporting courses must include one year of inorganic college chemistry including qualitative analysis with laboratory, one semester of organic chemistry with laboratory, one semester of college mathematics, and one semester of college physics with laboratory or Physical Science 201. Students preparing for graduate study or professional degrees in medicine, dentistry or public health should take: one year of inorganic chemistry including qualitative analysis with laboratory, one year of organic chemistry with laboratory, one year of analytical geometry and calculus, and one year of college physics with laboratory.

Minimum Course Requirements for the Major †

Lower Division

Biological Science	Units
100 Principles of Biology _____	2
140 Principles of Botany _____	3
160 Principles of Zoology _____	3
	<hr/>
	8
	8

* Transfer students should have completed the foreign language requirement and as many of the general education courses as possible prior to admission. However, uncompleted units may be satisfied while the upper division work is in progress by concurrent enrollment at a junior college or with appropriate courses offered at Orange State College.

† Substitutions in the program may be made for transfer students and others upon the recommendation of the adviser and the approval of the Department Chairman.

Upper Division

	Units
311 General Microbiology	4
312 Genetics Lecture	3
412 and 412L Cell Physiology	4
or	
444 Plant Physiology	—
Electives—14 units, of which 4 must be outside area of emphasis	14
	25
	25
	33

Minimum Requirements for Biological Science Minor †

Biological Science	
100, 140, 160 Principles	8
424 Evolution	3
or	
312 Genetics	—
311 General Microbiology	4
361 Mammalian Anatomy and Physiology	4
or	
412 and 412L Cell Physiology	—
444 Plant Physiology	—
Biological Science Elective	4
	23

† Substitutions in the program may be made for transfer students and others upon the recommendation of the adviser and the approval of the Department Chairman.

DEPARTMENT OF CHEMISTRY

Professor Bryden (Chairman)
Assistant Professors Montana, Shields

The curriculum is planned to provide thorough instruction in the basic principles and concepts of chemistry for students who will (1) continue on to graduate work in chemistry; (2) teach in the science programs of secondary schools; (3) seek employment in industry or government; or (4) pursue a chemistry minor of fundamental courses in chemistry in support of other areas such as physics and biology.

BACHELOR OF ARTS IN PHYSICS

The minimum requirements for the B.A. degree with a major in chemistry are the following: *

	Units	
Required units in chemistry	35	
Elective units in chemistry	9	
	—	
Total units in chemistry	44	44
Required units in physics, mathematics, and biology	31	31
	—	
Total units in science and mathematics		75
General Education units, not including 12 units of physical science, mathematic, and biology (see the General Education requirements, page 41)		38
Undesignated units		11
		—
Total units for the B.A. degree in chemistry		124

* Substitutions in the program may be made upon approval of the department chairman.

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The required courses in Science and Mathematics are as follows:

Chemistry:	Units
General Chemistry	10
Quantitative Chemistry	4
Organic Chemistry	8
Physical Chemistry	6
Physical Chemistry Laboratory	3
Advanced Inorganic Chemistry	3
Chemical Literature	1
Total units	35

Physics, Mathematics, and Biology (satisfies the General Education requirements in physical science, mathematics, and biology):

Physics	12
Mathematics	14
Biology	5
Total units	31

Proficiency in one modern foreign language (Russian, German, French) is required. (See Divisional requirement, page 93.)

MINOR IN CHEMISTRY

A minimum of 24 acceptable units of chemistry, including Organic Chemistry (8) and Physical Chemistry (6) are required for a chemistry minor.

Suggested Eight Semester Program for a Major in Chemistry

First Semester (Freshman)		Second Semester (Freshman)	
Chem. 101A—Gen. Chem.	5	Chem. 101B—Gen. Chem.	5
Math. 150A—Anal. Geo. & Calc.	4	Math. 150B—Anal. Geo. & Calc.	4
Eng. 101—Composition & Lit.	3	Physics 221—Fundamental Physics	4
Hist. 170A or 170B—U.S. History	3	Eng. 102—Lit. & Composition	3
P.E.—Phys. Ed. Activity	$\frac{1}{2}$	P.E.—Phys. Ed. Activity	$\frac{1}{2}$
	<hr/>		<hr/>
	15½		16½

Third Semester (Sophomore)		Fourth Semester (Sophomore)	
Chem. 301A—Org. Chem.	4	Chem. 301B—Org. Chem.	4
Chem. 302A—Org. Chem. Lab.	1	Chem. 302B—Org. Chem. Lab.	1
Math. 250A—Inter. Calc.	3	Chem. 212—Quant. Chem.	4
Physics 222—Fundamental Physics	5	Math. 250B—Inter. Calc.	3
Pol. Sci. 210—Amer. Government	3	Physics 223—Fundamental Physics	3
P.E.—Phys. Ed. Activity	$\frac{1}{2}$	P.E.—Phys. Ed. Activity	$\frac{1}{2}$
	<hr/>		<hr/>
	16½		15½

Fifth Semester (Junior)

Chem. 371A—Physical Chem.....	3
Bio. Sci. 100—Prin. of Biology.....	2
For. Lang. 101—Mod. For. Lang.	4
Gen. Ed.—Gen. Ed. Courses.....	7
	16

Sixth Semester (Junior)

Chem. 371B—Physical Chem.....	3
Bio. Sci. 140 or 160—Botany or Zoology.....	3
Elective in Chem.....	3
For. Lang. 102—Mod. For. Lang.	4
Gen. Ed.—Gen. Ed. Course.....	3
	16

Seventh Semester (Senior)

Chem. 441—Phys. Chem. Lab.....	3
Chem. 491—Chem. Literature.....	1
Elective in Chem.....	3
For. Lang. 203—Inter. For. Lang.	3
Gen. Ed.—Gen. Ed. Courses.....	6
	16

Eighth Semester (Senior)

Chem. 425—Adv. Inorg. Chem.....	3
Elective in Chem.....	3
For. Lang. 204—Inter. For. Lang.	3
Gen. Ed.—Gen. Ed. Courses.....	7
	16

DEPARTMENT OF MATHEMATICS

Professors.....	Ames (Chairman), Lay
Associate Professors.....	Gilbert, O'Toole
Assistant Professors.....	Langberg, Stiel

BACHELOR OF ARTS DEGREE IN MATHEMATICS

The program of studies in mathematics offers courses stressing the understanding of mathematical concepts and the axiomatic approach. A sufficient variety of courses is given to satisfy the needs of:

- (1) The proficient student aiming toward graduate study,
- (2) The student planning the use of mathematics in a career in industry and government service,
- (3) Preprofessional students in other science areas,
- (4) The prospective elementary and secondary teacher. (See special programs of study below.)

In addition to mathematics, the major candidates will be required to pursue a year of general college physics with a calculus prerequisite. Proficiency in one modern foreign language (Russian, German, French) is required. (See Divisional requirement, page 93.) Attention is called to all divisional requirements on page 93.

Major Program in Mathematics

Required Courses	Units
Analytic Geometry and Calculus	8
Intermediate Calculus	6
Linear Algebra	3
Modern Algebra	3
Advanced Calculus	6
Topology	3
Complex Analysis	3
Real Analysis	3
Abstract Algebra	3
Differential Geometry	3

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Orange State College

Minor Program in Mathematics

A Mathematics Minor shall consist of 20 units of course work selected from the mathematics course listing below, exclusive of Mathematics 100A-100B and Mathematics 120, each course to be completed with a grade of C or better.

Major Program in Mathematics for Teacher Education

Elementary Education	Units
Math. 100A—Axiomatic Arithmetic	3
Math. 150A-B—Analytic Geometry and Calculus	8
Math. 250A-B—Intermediate Calculus	6
Math. 291—Linear Algebra	3
Math. 300—Fundamental Concepts of Mathematics-Algebra	3
Math. 301—Fundamental Concepts of Mathematics-Geometry	3
Math. 320—Projective Geometry	3
Math. 330—Number Theory	3
Math. 335A—Probability and Mathematical Statistics	3
Electives in Mathematics, 300 courses or higher	9
—	44

Secondary Education	Units
Math. 150A-B—Analytic Geometry and Calculus	8
Math. 250A-B—Intermediate Calculus	6
Math. 291—Linear Algebra	3
Math. 300—Fundamental Concepts of Mathematics-Algebra	3
Math. 301—Fundamental Concepts of Mathematics-Geometry	3
Math. 320—Projective Geometry	3
Math. 330—Number Theory	3
Math. 335A—Probability and Mathematical Statistics	3
Electives in Mathematics, 300 courses or higher	9
—	41

Minor Program in Mathematics for Teacher Education

- For Secondary Education this minor is the same as the Minor Program in Mathematics at the top of this page.
- For Elementary Education the minor shall consist of 20 units of course work in mathematics selected from the mathematics course listing, a grade of C or better being required in each course.

DEPARTMENT OF PHYSICS

Professors Adams, R. (Chairman), Blend
Lecturer Bengtson

BACHELOR OF ARTS DEGREE IN PHYSICS

The program leading to the Bachelor of Arts degree in physics provides the fundamental instruction basic to the needs of the student who is preparing (1) to teach in elementary or secondary schools, (2) to undertake graduate work in physics or related fields, (3) to pursue additional collegiate studies leading to professional degrees in dentistry, law, medicine, nursing, and other professional, related areas, and (4) to seek employment in technical and applied fields.

The faculty is concerned that the student of physics shall have adequate education in other liberal arts subjects, including foreign language. Through curriculum requirements and through elective subjects, the physics student will be expected

to have a broad education in traditional liberal arts subjects, the several sciences, and mathematics. In particular, the student is urged to make his selections of elective courses outside the field of physics.

MINIMUM DEPARTMENTAL REQUIREMENTS FOR DEGREE *

Lower Division

General Chemistry (satisfies General Education physical science requirement)	10
Mathematics: Analytic Geometry and Calculus (satisfies General Education mathematics requirement)	14
Fundamental Physics	12
Modern Foreign Language (Russian, German, or French)	
Proficiency in one language required. (See Divisional requirement, page 93.)	

Upper Division Physics **

431. Electricity and Magnetism	3 units
441. Analytical Mechanics	3 units
411. Theory of Wave Motion	3 units
453. Nuclear Physics or 451. Modern Physics	3 units
416. Thermodynamics and Introduction to Kinetic Theory	3 units
455. Introduction to Quantum Physics	3 units
381. Advanced Physics Laboratory (electrical measurements and electronics)	2 units
382. Advanced Physics Laboratory (mechanics, acoustics, physical optics, atomic spectra)	2 units
481. Advanced Physics Laboratory (atomic and nuclear physics)	2 units
482. Advanced Physics Laboratory (selected experiments in classical and modern physics)	2 units
Total	26 units

Required Mathematics

Mathematics courses in addition to Analytic Geometry and Calculus	9 units
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Summary of Degree Requirements (Minimum)

Total required units prerequisite to major, in major, and in mathematics, both upper and lower division (71 units less 7 units credited to General Education)	64 units
Total General Education requirements	50 units
Total electives	10 units
Total minimum requirements for degree	124 units

MINOR IN PHYSICS

A minimum of 20 units of physics are required for a minor. These shall include 12 units of lower division physics (or equivalent as determined by the department of physics), and a minimum of 8 units of upper division physics, including a minimum of 2 units of advanced physics laboratory.

* Substitutions in the program may be made upon the approval of the department chairman.

** Theory courses will normally be taken in the order of listing. Laboratory courses will normally be taken in numerical order of course number.

Orange State College

Suggested Eight-Semester Program for Major in Physics

Semester 1. Freshman	Units
Math 150 A. Analytic Geometry and Calculus	4
Engl. 101. Composition and World Literature	3
For. Lang. 101. Fundamental Russian, German, or French	4
General Ed. Any required General Education course	3
P. E. Any Physical Education activity course	1/2
Total	14 1/2
Semester 2. Freshman	
Math 150B. Analytic Geometry and Calculus	4
Engl 102. World Literature and Composition	3
For. Lang. 102 Fundamental Russian, German, or French	4
Phys 221. Fundamental Physics	4
P. E. Any Physical Education activity course	1/2
Total	15 1/2
Semester 3. Sophomore	
Math 250 A. Intermediate Calculus	3
Phys 222. Fundamental Physics	5
For. Lang. 203. Intermediate Russian, German, or French	3
Chem 101 A. General Chemistry	5
P. E. Any Physical Education activity course	1/2
Total	16 1/2
Semester 4. Sophomore	
Math 250 B. Intermediate Calculus	3
Phys 223. Fundamental Physics	3
For. Lang. Intermediate Russian, German, or French	3
Chem 101 B. General Chemistry	5
Biol 100. Principles of Biology	2
P. E. Any Physical Education activity course	1/2
Total	16 1/2
Semester 5. Junior	
Math 291. Linear Algebra	3
Phys 431. Electricity and Magnetism	3
Phys 381. Advanced Physics Laboratory	2
General Ed. Any required General Education course	3
General Ed. Any required General Education course	3
Biol. 160. Principles of Zoology, or }	3
Bot. 140. Principles of Botany }	3
Total	17

The faculty is concerned that the student maintain a minimum of 12 units of liberal arts courses in other liberal arts subjects, including foreign language. Through curriculum requirements and through elective subjects, the physics student will be expected

Semester 6. Junior	Units
Math 350 A. Advanced Calculus	3
Phys 441. Analytical Mechanics	3
Phys 382. Advanced Physics Laboratory	2
General Ed. Any required General Education course	3
General Ed. Any required General Education course	3
General Ed. Any required General Education course	3
Total	17

Semester 7. Senior	Units
Math 350 B. Advanced Calculus	3
Phys 411. Theory of Wave Motion	3
Phys 453. Nuclear Physics (or Phys 451. Modern Physics)	3
Phys 481. Advanced Physics Laboratory	2
General Ed. Any required General Education course	3
Total	14
(Honor students may add Physics 491. Senior Report (1).)	

Semester 8. Senior	Units
Phys 416. Thermodynamics and Introduction to Kinetic Theory	3
Phys 455. Introduction to Quantum Physics	3
Phys 482. Advanced Physics Laboratory	2
General Ed. Any required General Education course	3
Elective	3
Total	14
(Honor students may add Physics 492. Senior Report (2).)	

DEPARTMENT OF SCIENCE AND MATHEMATICS EDUCATION

Professor	Lay
Associate Professor	Turner
Assistant Professor	Holmes

Courses, workshops and institutes designed to aid the teacher in presenting and interpreting science and mathematics will be offered by the department. Science and mathematics students seeking credentials should consult one of the members of the department regarding credential regulations.

It also provides students with a practical base for research work in one of the several fields of Geography at the graduate level.

Depending on individual interest, students may plan the major program to emphasize either physical or cultural Geography. In planning a program the student should keep his professional objectives in mind. For example, those students intending to enter business or commercial fields should elect related courses in Business Administration, Economics or Statistics and those planning a career in government should elect related courses in Economics, History, Political Science, Sociology, and Statistics.

Unit Requirements
The major in Geography requires the completion of a minimum of 48 units of course work. These units are in addition to those which have been used to meet the general education requirement. It is suggested that students meet the general education requirements by taking courses outside the department. Unit requirements are as follows:

DIVISION OF SOCIAL SCIENCES

Division Chairman _____ Giles T. Brown

The division of Social Sciences offers courses in the fields of Anthropology, Geography, History, Political Science, Psychology, and Sociology. In addition, it accepts certain courses in Economics toward the degree of Master of Arts in the Social Sciences. In each field, classes are provided for undergraduates who are preparing for graduate study and professional work; also, graduate work is provided for qualified students pursuing programs that lead to master's degrees. The offerings of the division are designed to provide a better understanding of man's behavior past and present, of the historical, social, environmental forces that operate in the world, and of the significant problems of the present day.

The following Master's Degrees are offered by the Division:

Master of Arts in the Social Sciences

Master of Arts in History

The following undergraduate majors and teaching minors are offered by the Division:

Major in Geography

Major in History

Major in Political Science

Major in Psychology

Major in Sociology

Teaching Minor in Geography

Teaching Minor in History

Teaching Minor in Political Science

Teaching Minor in Sociology

DEPARTMENT OF GEOGRAPHY

BACHELOR OF ARTS IN GEOGRAPHY

Associate Professor _____ Earick (Chairman)

Assistant Professors _____ Helin, Reith

The major in Geography is designed to contribute to a broad, liberal education and to fulfill the requirements of sound, professional preparation. This basic program emphasizes the relationship of man's complex cultural patterns to the earth's physical foundation. It also provides students with a practical base for intensive work in one of the several fields of Geography at the graduate level.

Depending on individual interest, students may plan the major program to emphasize either physical or cultural Geography. In planning a program the student should keep his professional objective in mind. For example, those students intending to enter business or commercial fields should elect related courses in Business Administration, Economics or Statistics and those planning a career in government should elect related courses in Economics, History, Political Science, Sociology, and Statistics.

Unit Requirements

The major in Geography requires the completion of a minimum of 48 units of course work. These units are in addition to those which have been used to meet the general education requirement. It is suggested that students meet the general education requirements by taking courses outside the department. Unit requirements are as follows:

Orange State College

Geography Courses

As many as 12 units are acceptable from lower division offerings. Upper division courses must be selected from offerings in both systematic and regional Geography. The following courses are required of all majors: Geography 111, 121, 323, 343.

	Units
Minimum of _____	36

Related Courses

Courses may be taken in the upper or lower division in such fields as Anthropology, Astronomy, Botany, Economics, Geology, History, Physics, Political Science, Sociology, and Statistics. The student is to select, with the consent of his adviser, work in two of these fields.

	Units
Minimum of _____	12
Total _____	48

Students intending to take graduate work in Geography should acquire a reading knowledge of at least one modern foreign language.

MINOR IN GEOGRAPHY

The minor in Geography is intended as a second field for persons completing a major in another discipline in preparation for a teaching credential. It is designed to give a basic understanding of earth science and the geographic relationships helpful to the classroom teacher. The program gives a balance between the physical and social sciences.

Required Courses

Geography 111, 121 and 343

One course selected from:

Geography 312, 323 and 353

One course selected from:

Geography 333, 383, 471 and 481

Two courses selected from:

Geography 363, 432, 433, 434, 435, and 436 and 438.

Minimum units required _____ 20

DEPARTMENT OF HISTORY

BACHELOR OF ARTS IN HISTORY

Professors _____ Brown (Chairman), Langsdorf *

Associate Professors _____ Beck, Povlovich, Toy,* Unterberger

Assistant Professors _____ de Graaf, Erue, Giacomakis, Newby, Sailor

The undergraduate major in History is designed to provide an understanding of the present through a careful study of the past. This major may be pursued to fulfill various professional and cultural objectives common to a liberal arts program. It serves, especially, as a preparation for teaching, law, government, and other public services, and as the foundation for advanced study at the graduate level.

The major is composed of a minimum of 24 units in the upper division, plus the basic courses in World Civilizations (History 110A-110B) and United States History (History 170A-170B). The basic courses may also be used to meet general education requirements. Students majoring in History are encouraged to include in their lower division programs some work in such fields as Anthropology, Economics, Geography, Literature, Philosophy, Political Science and Sociology.

* College Administrative Officers.

Students intending to do graduate work in History should acquire a reading knowledge of at least one foreign language appropriate to the pursuit of advanced research in a field of History.

The twenty-four (24) units of upper division courses required for the major must include:

- History 399: Historiography (3 units)
- Six (6) units in United States History
- Six (6) units in European History (from ancient Greece to modern times)
- Six (6) units in the History of Asia, Africa, and Latin America

MINOR IN HISTORY

The teaching minor in History is composed of at least twenty (20) units in History exclusive of the general education requirements.

MASTER OF ARTS IN HISTORY

The program of studies leading to the Master of Arts Degree in History is composed of thirty (30) units approved by the graduate adviser.* Fifteen (15) units of graduate courses (500 level) must be taken including:

- History 501, Seminar in the Content and Method of History (3 units);
- History 590, History and Historians (3 units); and
- History 591, Thesis (3 to 6 units)

Other course requirements include six (6) units in upper division or graduate work outside the History Department but related to the study pattern.

In addition, a reading knowledge of an appropriate foreign language and the completion of the Aptitude Test and the Advanced Test in History of the Graduate Record Examination are required. An oral examination on the thesis and course work offered for the degree will be given. Prior to the appointment of a graduate adviser, the following steps must be completed:

1. Admission to the college as an unclassified graduate student;
2. Filing in the Office of Admissions of two official sets of transcripts of all collegiate and graduate work; and
3. Submission of satisfactory results of the Graduate Record Examination.

In consultation with his graduate adviser, the student will develop a proposed Study Plan. When approved by his graduate adviser and pursued satisfactorily the programmed work can lead to the Master's degree, subject to the completion of all other requirements for the degree.**

DEPARTMENT OF POLITICAL SCIENCE

BACHELOR OF ARTS IN POLITICAL SCIENCE

Professors _____ Hyink,† Mason (Chairman)
Assistant Professors _____ Ashley, Cook, Foster, Kerschner

The major is composed of 30-36 units of Political Science, plus 12-18 units in related departments taken with the approval of the adviser. These units are in addition to those meeting the general education requirements. Prospective majors are encouraged to take lower division courses in Economics, Geography, History, Psychology, and Sociology. All majors are required to take at least one course from each of the Groups listed below and courses 100 and 306. All majors must also take one of the Concentrations as listed.

* Consult adviser relative to prerequisites.

** See general college requirements, pp. 44-47.

† College Administrative Officer.

Orange State College

Political Science Courses

In each Group, the courses marked with (†) should be taken first.

Political Theory

- † 341 Fundamental Principles of Political Theory
- † 342 Specific Problems in Political Theory
- 440 Recent Political Thought
- 442 American Political Thought

Comparative Government

- † 331 Governments and Politics of Major Powers
- 432 Government and Politics of Great Britain
- 433 Government and Politics of Soviet Russia
- 434 Government and Politics of France
- 435 Government and Politics of Germany
- 453 Foreign Policy Formulation

International Relations

- † 351 International Relations
- 452 American Diplomacy
- 453 Foreign Policy Formulation
- 454 The Soviet Union in World Affairs
- 460 International Law
- 461 The United Nations and Other Public International Organizations

Public Administration

- † 311 State and Local Government
- † 320 Introduction to Public Administration
- 421 Governmental Finance Administration
- 422 Public Personnel Administration
- 423 Urban Problems and Administration
- 424 City and Regional Planning
- 426 Government Organization and Management
- 429 Government Internship

American Politics

- † 311 State and Local Government
- † 312 Political Parties and Pressure Groups
- 411 The Judicial Process
- 413 Constitutional Law
- 414 The Legislative Process
- 415 Public Opinion and Political Behavior
- 442 American Political Thought

Public Law

- † The Judicial Process
- 413 Constitutional Law
- 432 Government and Politics of Great Britain
- 460 International Law

Concentrations are offered in (1) Theory and Politics, (2) Law and Society, (3) International Affairs, and (4) Public Administration.

THEORY AND POLITICS

This concentration prepares the student for graduate work in Political Science, for government service, and for leadership in civic activities. Thirty-six units of Political Science are required, including 6 units each in Political Theory, American Politics, Comparative Government and International Relations. Students planning graduate work are advised to become proficient in a foreign language.

LAW AND SOCIETY

This concentration is intended primarily for pre-Law students. It enables them to take courses in a variety of fields which provide appropriate preparation for law school; catalogs of individual law schools should be consulted for specific recommendations. Twelve units in Public Law and 15 in Political Theory and/or American Politics are required.

INTERNATIONAL AFFAIRS

This concentration prepares students for graduate work in international affairs, for government and United Nations service, and for business responsibilities in foreign countries. Students particularly interested in the Foreign Service are encouraged to take their elective units in American culture, geography and history, and are strongly urged to become proficient in a foreign language. Twelve units must be taken in International Relations and 6 in Comparative Government.

PUBLIC ADMINISTRATION

This concentration provides training for service in local and state government, and for graduate work in public administration. Thirty-six units of Political Science are required, including 18 in Public Administration.

MINOR IN POLITICAL SCIENCE

The minor is composed of 21 units of Political Science, in addition to those meeting the general education requirements. All minors are required to take three courses from any one of the Groups listed under *Major in Political Science*.

DEPARTMENT OF PSYCHOLOGY

BACHELOR OF ARTS IN PSYCHOLOGY

Professor _____ Schmidt (Chairman)
Associate Professor _____ Levy
Assistant Professors _____ Calhoun, Carlson, James

The major in Psychology consists of 36 units of lower and upper division work designed for students (1) who want a sound background in Psychology or a science, (2) who want a basic understanding of human behavior as a supplement to some other major course of study, and (3) those who wish to acquire a thorough undergraduate training in Psychology in anticipation of professional study.

Requirements for the Major

Lower Division:

	Units
Psychology 101 Introductory Psychology _____	3
Psychology 161 Elementary Statistics _____	3
Psychology 202 Principles of Psychology _____	3

Upper Division: In order to take upper division work, at least six units of Psychology (including Psychology 101) must have been completed in the lower

Orange State College

division. In addition, a minimum of 27 units of upper division work constitutes a major in Psychology. Fifteen units are required as follows:

Psychology 302	Experimental Psychology: Learning and Motivation	Units 3
Psychology 303	Experimental Psychology: Sensation and Perception	3
or		
Psychology 421	Physiological Psychology	3
Psychology 351	Social Psychology	3
or		
Psychology 331	Psychology of Personality	3
Psychology 461	Group Psychological Testing	3
Psychology 408	History of Psychology	3

A minimum of 12 additional units in Psychology courses will be selected in consultation with the academic adviser.

Recommended Related Courses

Courses from each of the following areas according to the student's interests: (1) Social Sciences; (2) Physical Sciences; (3) Biological Sciences, preferably Physiology; (4) Mathematics; (5) Humanities, such as Philosophy, Literature. Psychology majors planning to do graduate work are urged to take work in foreign languages.

DEPARTMENT OF SOCIOLOGY BACHELOR OF ARTS IN SOCIOLOGY

Professor..... F. J. Davis (Chairman)
Assistant Professors..... Jacobson, Palisi, J. R. Smith

The major in Sociology provides knowledge concerning the structure and functioning of human society. It may be applied in a wide range of situations in which the student may participate professionally or as a citizen.

Unit Requirements

The required minimum for the major is 42 units, in addition to those taken for the general education requirement, distributed as follows:

Courses in Sociology

Thirty units must be taken in Sociology, 24 in upper division courses. Sociology 201 is required, and 3 additional units are acceptable from lower division offerings. The minimum of 24 upper division units must include 331A, 331B, 341, 481, and at least one of the following: 436, 470, 473, 477.

Minimum units..... 30

Related Courses

Twelve upper division units are to be taken in the related fields of Anthropology, Economics, Geography, History, Political Science, and Psychology, to be approved by the major adviser.

Minimum units..... 12

Minimum total units for the major..... 42

The following suggestions will enable the student to work towards his own career objectives in selecting courses to meet the above requirements for the major in Sociology.

- (a) Courses suggested for preparation for graduate study in Sociology and careers in teaching or research: Sociology 348, 361, 371, 436, 451, 473, 477, 480; Anthropology 201A, 201B, 421; Economics 200A, 200B, 302, 303, 326; Geography 121, 471; History 429, 474, 475, 476; Philosophy 250, 331, 407; Political Science 312, 331, 341, 415; Psychology 331, 341, 431; a reading knowledge of at least one foreign language.
- (b) Courses suggested for those interested in immediate employment or graduate study in social work, corrections and related careers: Social Welfare 311; Sociology 202, 371, 411, 431, 436, 451, 465, 470; Anthropology 201B; Economics 200A, 201; Geography 121, 471; Philosophy 310, 331; Psychology 341, 342; Political Science 311, 320.
- (c) Courses suggested for careers in industry or government service, or for pre-law: Sociology 202, 361, 371, 411, 465, 470, 473; Anthropology 201B; Economics 200A, 200B, 201, 326, 401; Geography 471, 481; History 475, 476; Political Science 320, 413, 414, 423, 461; Psychology 342, 391.

Anthropology

Courses in Anthropology are being started in 1964-65, with the expectation that a major in the field will be approved soon.

Social Welfare

Students seeking employment or graduate study in social work should refer to paragraph (b) under the Sociology major if they plan to major in Sociology; but satisfactory preparation is also provided by other majors, such as Psychology, Anthropology, Economics, or Political Science. There is no major in social welfare, but one course, Social Welfare 311: Welfare Institutions, provides an orientation to the field.

MINOR IN SOCIOLOGY

For teaching credential purposes a minor consists of 21 units in Sociology. Sociology 201 is the only specific course required, but 15 units must be in upper division courses. It is urged that some of the courses required of Sociology majors be considered, and also the courses listed under "(a)" *Major in Sociology*.

MASTER OF ARTS IN THE SOCIAL SCIENCES

The Master of Arts degree in Social Sciences allows a student to pursue advanced work in two or three related fields.* Selection may be made from the following: Economics, Geography, History, Political Science, Psychology, and Sociology. The thirty (30) units approved by the graduate adviser are to be arranged in one of the following patterns:

Pattern A (two fields)	First field	18 or 15	units
	Second field	12 or 15	units
		30	30 units
Pattern B (three fields)	First field	15 or 12 or 12	units
	Second field	9 or 12 or 9	units
	Third field	6 or 6 or 9	units
		30	30 30 units

* Consult adviser relative to prerequisites.

Orange State College

Specific requirements include:

At least twelve (12) units of graduate courses (500 level)

An upper division or graduate level course in Research Methods and Bibliography in one of the Social Sciences

Thesis or project

Oral examination on the thesis or project and on the courses offered for the degree

Satisfactory completion of the Aptitude Test of the Graduate Record Examination

The Area Test of the Graduate Record Examination may be required.

There is no foreign language requirement, but certain fields may require work in Statistics. The graduate adviser will be selected from the first field. All work must be completed within five years from the time graduate classified standing has been attained. Prior to the appointment of a graduate adviser, the following steps must be completed:

1. Admission to the college as an unclassified graduate student;

2. Filing in the Office of Admissions of two official sets of transcripts of all collegiate and graduate work; and

3. Submission of satisfactory results of the Graduate Record Examination.

In consultation with his graduate adviser, the student will develop a proposed Study Plan. When approved by his graduate adviser and pursued satisfactorily the programmed work can lead to the Master's degree, subject to the completion of all other requirements for the degree.*

* See general college requirements, pp. 44-47.

Professor

Assistant Professor

Associate Professor

Associate Professor

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ACCOUNTING

IN THE DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

(Offered by the Department of Accounting and Finance)

101A-B. Elementary Accounting (3-3) F, S

Prerequisite: None. This course is designed for students who are new to accounting. It covers the basic principles of accounting, including the accounting cycle, journalizing, and posting. The course is divided into two semesters. The first semester covers the basic principles of accounting, and the second semester covers the application of these principles to the preparation of financial statements. The course is designed to provide students with a solid foundation in accounting principles and procedures.

Note: The figure in parentheses following each course title indicates the number of semester hours. The F and S (abbreviations for Fall and Spring) after the course title indicates the semester in which the course is offered. The asterisk (*) indicates that the course is offered on a part-time basis. The double asterisk (**) indicates that the course is offered on a full-time basis.

Prerequisites: Accounting 101B or 200. This course is designed for students who have completed Accounting 101B or 200. It covers the basic principles of accounting, including the accounting cycle, journalizing, and posting. The course is designed to provide students with a solid foundation in accounting principles and procedures.

ANNOUNCEMENT OF COURSES AND FACULTY DIRECTORY

FOR 1963-1964

34. Managerial Accounting (3) F, S

Prerequisite: Accounting 101B or 200. This course is designed for students who are interested in accounting. It covers the basic principles of accounting, including the accounting cycle, journalizing, and posting. The course is designed to provide students with a solid foundation in accounting principles and procedures.

37. Distribution Costs (3) S

Prerequisites: Accounting 101B or 200, and Marketing 101. The development of distribution costs for a business activity, including the development of distribution channels, advertising, sales, and transportation. The course is designed to provide students with a solid foundation in distribution costs and procedures.

Specific requirements include:

At least twelve (12) units of graduate courses (500 level)

An upper division or graduate level course in Research Methods and Bibliography in one of the Social Sciences

Thesis or project

Oral examination on the thesis or project and on the courses offered for the degree

GENERAL COURSE NUMBERING CODE

- 1- 99 Courses which carry no credit toward a degree or credential
- 100-299 Lower division courses of freshman and sophomore level, but open also to upper division students
- 300-499 Upper division courses of junior and senior level
- 500-599 Courses on the graduate level

NOTE: The figure in parentheses following each course title indicates the number of semester units. The F and S (abbreviations for Fall and Spring) after the parentheses indicate when a course is offered.

PREREQUISITES

Students are expected to meet stated prerequisites for all courses. However, in exceptional cases, and at the discretion of the division in which the course is taught, students may be allowed to meet prerequisites by examination.

INDEPENDENT STUDY

Under the Independent Study Program, the upper division student can pursue topics or problems of special interest beyond the scope of a regular course under the supervision of a faculty adviser. The work is of a research or creative nature, and normally culminates in a paper, project, comprehensive examination, or performance. Before registering, the student must get his topic approved by the professor who will be supervising independent study. The catalog number for independent study in all departments is 499. Independent study courses may be repeated, but 3 units is the maximum credit that may be earned in one semester.

Independent Study is not limited to Honors students, but all those in the Honors Program are especially urged to undertake some of this work in the major field. The student who can be expected to profit from independent study has exceptional initiative and persistence, and a desire to delve into some special project on his own.

ACCOUNTING

IN THE DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

(Offered by the Department of Accounting and Finance)

101A-B. Elementary Accounting (3-3) F, S

Prerequisite: Accounting 101A must be taken before taking Accounting 101B. These courses are to be taken by sophomores to fulfill the core requirement in Accounting.

Accounting concepts and techniques essential to the administration of a business enterprise; analyzing and recording financial transactions; preparation of financial statements; analysis and interpretation of financial statements; introduction to manufacturing accounts and reports.

200. Elementary Accounting (5) F, S

Prerequisite: Junior standing. This course is to be taken only by transfer students, with junior standing. Duplicates 101A and 101B.

Accounting concepts and techniques essential to the administration of a business enterprise; analyzing and recording financial transactions; preparation of financial statements; analysis and interpretation of financial statements; introduction to manufacturing accounts and reports.

300. Accounting Fundamentals (3) F, S (Open only to graduate students)

The basic fundamentals of accounting as they apply to the accumulation, organization, and interpretation of financial and quantitative data relevant to the activities of the corporate business enterprise.

301A-301B. Intermediate Accounting (3-3) F, S

Prerequisite: Accounting 101B or 200. The quantification, recording, and presentation of balance sheet and income statement items with particular emphasis on the corporate type of organization; statement of application of funds; cash flow statement; basic concepts of accounting theory; interpretation of financial statements.

302. Cost Accounting (3) F, S

Prerequisite: Accounting 101B or 200. The development of accounting information for management of manufacturing enterprises; cost records; cost behavior and allocation; standard costs; and an introduction to cost control.

303. Governmental Accounting (3) F

Prerequisite: One course in Accounting. A consideration of the accounts and reports of non-profit institutions, municipalities, state and federal governments; organization, procedures, budgets.

304. Managerial Accounting (3) F, S

Prerequisite: Accounting 101B or 200. This course is intended for students whose area of concentration is not accounting. Analysis, interpretation, and application of accounting information for managerial decision-making; budgets and budgetary control; special-purpose reports; differential cost analyses.

307. Distribution Costs (3) S

Prerequisites: Accounting 101B or 200, and Marketing 351. The development of quantitative measures for marketing activity; costs of distributing through different channels of distribution, advertising vs. personal selling, and movement activities; development of sales budgets, standard costs, and the analysis of actual performance in the light of budgets and standards. (Same as Marketing 307.)

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308. Federal Income Tax (3) F

Prerequisite: Accounting 101B or 200. Basic consideration of the history, theory, and accounting aspects of federal income taxation.

401. Advanced Accounting (3) S

Prerequisite: Accounting 301B. A study of partnerships, statements for special purposes, receiverships, consolidated financial statements, branch accounting and foreign exchange.

402. Auditing (3) S

Prerequisites: Accounting 301B and 302. Nature of an audit, auditing standards and procedures, audit reports; professional ethics and responsibilities of the independent public accountant; introduction to internal auditing.

405. Industrial Accounting (3) F, S

Prerequisite: Accounting 101B, or 200, or 300.

This course is intended for students whose area of concentration is not accounting. Accounting information for industrial management; elements of manufacturing cost; cost systems; standard costs; costs reports; distribution cost analysis.

406. Cost Control (3) S

Prerequisite: Accounting 302 or 405. A study of current and persistent problems in cost accounting; theories of cost allocation and absorption; flexible budgeting; responsibility accounting; and distribution cost control.

407. Integrated Data Processing Systems (3) F (Formerly 408)

Prerequisites: Senior standing, and the consent of the instructor. A survey of integrated systems for the collection, processing, and transmission of information; management aspects of the information service function; feasibility studies; introduction to programming; case studies of operating systems.

408. Problems in Taxation (3) S

Prerequisite: Accounting 308. Research in problems of taxation with emphasis on income taxes as they relate to corporations, partnerships and fiduciaries.

409. C.P.A. Problems and Review (3) S

Prerequisite: Accounting 401, or consent of the instructor. Selected problems and questions as found in the uniform C.P.A. Examination; preparation, analysis and revision of financial statements; assets, liabilities and ownership equities; income determination; cost accounting; governmental and institutional accounting; accounting theory.

499. Independent Study (3) F, S (Formerly 498)

Prerequisites: Senior standing and approval by the department chairman. Open to qualified undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit.

501. Administrative Accounting (3) F, S

Prerequisites: Accounting 405, Finance 330, and consent of the instructor. Accounting, financial, and other quantitative data for managerial decision-making; long-term and short-term profit planning; budgetary control; cost analysis and special reports; financial analysis and planning; the financial and taxation aspects of business decisions.

502. Seminar in Accounting Theory (3) S

Prerequisites: Graduate standing and consent of the instructor. The concepts and theory of accounting; the effects of professional, governmental, business, and social forces on the evolution of accounting theory.

ANTHROPOLOGY

IN THE DIVISION OF THE SOCIAL SCIENCES

(Offered by the Department of Sociology)

201A. Introduction to Anthropology (3) F

The physical anthropology of human origins and the development of the races; archeological evidence of pre-historic cultural growth, especially in the Near East and the Western world.

201B. Introduction to Anthropology (3) S

Variations, integration and change in human cultures, particularly preliterate ones, with emphasis on such institutional forms as economy, government, religion, art, and family.

321. The American Indians (3) F

Physical and cultural characteristics of the native peoples of the New World, and the impact of contact with the Europeans. Major tribes of North America, Mexico, Central and South America are included.

421. Primitive Religions (3) S

Beliefs and practices in preliterate religious systems; the forms, symbolism, and social and cultural roles of these systems. Includes such topics as magic, animism, art and religion, shamans and priests, and cults.

ART

IN THE DIVISION OF FINE AND APPLIED ARTS

100. Exploratory Course in Art (3) F, S

Exploration and creative use of a variety of art materials, processes, and concepts. Field trips required. Not open to art majors for credit except by permission of the Art Department.

101. Introduction to Art (3) F

A course for the general student designed to develop an understanding of historical and contemporary art forms. Illustrated with examples of painting, sculpture, architecture, and design. Field trips required. Not open to art majors for credit except by permission of the Art Department.

103. Two-Dimensional Design (3) F

The inventive use of materials, tools, and elements of plastic organization as related to a two-dimensional surface.

104. Three-Dimensional Design (3) S

The inventive use of materials, tools, and elements of plastic organization as related to three-dimensional surfaces and forms.

106A,B. Beginning Ceramics (3,3) F, S

A basic course in the study of form as related to ceramic materials, tools, processes, and concepts.

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107A,B. Beginning Drawing and Painting (3,3) F, S

Beginning work in the creative use of the materials of drawing and painting with emphasis on visual concepts and use of medium, individual exploration, growth, planning and craftsmanship.

111. Fundamentals of Art (3) S

A comparative study of the elements of plastic organization in relation to personal and cultural aesthetic expression and concepts. Fundamental art ideas, problems of organization and structure, and terminology. Field trips required.

117A,B,C,D. Life Drawing (1,1,1,1) F,S

Drawing from the live model. 117B will include working from the model with three-dimensional materials.

201A,B. Art and Civilization (3,3) F, S

A comparative survey of the basic ideas, forms, and styles of the visual arts as they developed in various cultures from prehistoric time to the present day.

205A,B. Beginning Crafts (3,3) F, S

Prerequisite: Art 103 or Art 100. A study of form as related to the concepts, materials, and processes involved in the making of both two and three-dimensional art forms from wood, metal, plastics, and paper.

207A,B. Drawing and Painting (3,3) F, S

Prerequisite: Art 117A,B; Art 107A,B; Art 103, or the equivalents. An intensive study of devices and means for representing volume, structure, and character of objects. Emphasis in 207A on the use of drawing materials in relation to man-made and nature objects and in 207B on the use of painting materials in relation to the head and figure.

216A,B. Beginning Sculpture (3,3) F, S

Prerequisite: Art 104. An introductory course in sculpture with emphasis on the creative use of wood and metal, power equipment and hand tools.

301. Western Art: Ancient to Classic (3) F

A study of the developments in art from pre-historic time to the classic period in Greek art.

302. Western Art: Classic to Renaissance (3) S

Provides broad familiarity with the major styles of classic, medieval, and Russian art. Lectures, discussions and field trips.

305A,B. Crafts (3,3) F, S

Prerequisite: Art 103 and 104, or 205A, or 100 and 432 or the equivalent. A study and evaluation of basic craft concepts, processes, and materials as they relate to the development of utilitarian forms.

306A,B. Advanced Ceramics (3,3) F, S

Prerequisite: Art 106A or 106B. Further experiences in the study and evaluation of form as related to the creative use of ceramic concepts and materials including design, forming, glazing, and firing.

307A,B. Drawing and Painting (3,3) F, S

Prerequisite: one semester of drawing and one semester of painting. The study, evaluation, and creative use of the concepts and materials of drawing and painting with emphasis on individual exploration, growth, planning and craftsmanship.

309. Art Techniques (3) F, S

Prerequisite: Art 100 or the equivalent. Creative use of a variety of drawing and painting materials.

311. Western Art: Renaissance and Baroque (3) F (Formerly Art 310)

Basic problems of painting, sculpture and architecture of the Renaissance and Baroque periods. Lectures, discussion, and field trips. Also recommended for Humanities and history students.

312. History of Art Since 1800 (3) S

Art of the Nineteenth Century and its development into contemporary times.

313A,B. Interior Design (3,3) S

Prerequisites: Art 103, 104, 107A,B. Development and projection of ideas in relation to the functional, social, and aesthetic problems involved in the design and planning of living spaces for homes and small offices.

316A,B. Sculpture (3,3) F, S

Prerequisite: Art 205A,B. Theory, study and practice of basic sculpture processes using a variety of materials.

317A,B. Advanced Life Drawing (3,3) F, S

Prerequisite: three units lower division life drawing. Drawing and painting from the live model.

323A,B. Advertising Design (3,3) F

Prerequisite: Art 103, 104, 107A,B. Development and projection of ideas in relation to the technical, aesthetic, and psychological aspects of advertising art.

333A,B. Industrial Design (3,3) (Offered in alternate years)

Prerequisites: Art 103, 104 or 205A, 107A,B. Planning and designing of projects in relation to the technological, psychological, and social aspects of contemporary society.

347A,B. Printmaking (3,3) S

Prerequisite: Art 107A,B and Art 117A,B,C. An introduction to concepts and materials involved in printmaking including lithography, etching, woodcut, aquatint, monoprint and serigraphy.

350A,B. Painting for Non-Art Majors (3,3) F, S

Opportunities for students with little or no background in art to work creatively with various painting media both indoors and outdoors.

353A,B. Textile Design (3,3) (Offered in alternate years)

Prerequisite: Art 100 or Art 103. The creative exploration and design of fabrics relative to the needs of apparel, furniture, architecture, and interiors using both printed and woven processes.

380. Art and Child Development (3) F, S

Prerequisite: Art 100. The study and evaluation of art concepts, materials, and processes as they relate to and promote child development.

401. Contemporary Art (3) F (Offered in alternate years)

Fundamentals of modern painting, graphics, and photography.

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402. Contemporary Art (3) 5

Fundamentals of modern architecture, interior design, sculpture, and industrial design. Lectures, discussions, and field trips.

411. Primitive Art (3)

A study of the art of primitive groups and cultures.

421. Oriental Art (3) 5

The major styles of Oriental art including ancient cultures and recent trends in Japan, China, India, and Islam. Lectures, discussions, and field trips. Also recommended for humanities and history students.

453A,B. Display and Exhibition Design (2,2) F, 5

A course in the appropriate and creative use of materials, processes, and design concepts as they relate to the special problems involved in the planning and preparing of displays, exhibits, bulletin boards, wall cases, and art portfolios.

481. Special Studies in Art History and Appreciation (1-3) 5

Prerequisite: permission of the instructor. Opportunities for intensive study and evaluation in one area of art history and appreciation.

483. Special Studies in Design (1-3)

Prerequisite: permission of the instructor. Opportunity for intensive study in the design areas listed below. Each area listed may be repeated to a maximum of 8 units, but no more than 3 units of credit may be obtained in any one area in a single semester.

483a. Advertising Design (F)

483b. Interior Design (S)

483c. Design and Composition (F, S)

483d. Display Design (F, S)

483e. Textile Design (Offered in alternate years)

485. Special Studies in Crafts (1-3)

Prerequisite: permission of the instructor. Opportunity for intensive study in the craft areas listed below. Each area listed may be repeated to a maximum of 8 units, but no more than 3 units of credit may be obtained in any one area in a single semester.

485a. Jewelry (S)

485b. General Crafts (F, S)

485c. Ceramics (F, S)

485d. Weaving (Offered in alternate years)

486. Special Studies in Sculpture (1-3) F, 5

Prerequisite: Art 316A,B and permission of the instructor. Opportunity for intensive study in the following sculptural processes: modeling, carving, fabrication and casting. May be repeated to a maximum of 8 units but no more than 3 units of credit may be obtained in a single semester.

487. Special Studies in Drawing and Painting (1-3)

Prerequisite: permission of the instructor. Opportunity for intensive study in the drawing and painting areas listed below. Each area listed may be repeated to a maximum of 8 units, but no more than 3 units of credit may be obtained in any one area in a single semester.

- 487a. Painting (F, S)**
- 487b. Life Drawing (F, S)**
- 487c. Drawing (F)**
- 487d. Printmaking (S)**

503. Graduate Problems in Design (1-3 units)

Prerequisite: permission of instructor. Intensive study with emphasis on planning, development, and evaluation of individual projects in the design areas listed below. May be repeated to a maximum of 8 units in each area, but no more than 3 units of credit may be obtained in any one area in a single semester.

- 503a. Advertising Design (F)**
- 503b. Interior Design (S)**
- 503c. Design and Composition (F, S)**
- 503d. Display Design (F, S)**
- 503e. Textile Design (S) (Offered in alternate years)**

505. Graduate Problems in Crafts (1-3)

Prerequisite: permission of instructor. Intensive study with emphasis on planning, development, and evaluation of individual projects in the crafts areas listed below. May be repeated to a maximum of 8 units but no more than 3 units of credit may be obtained in a single semester.

- 505a. Jewelry (S)**
- 505b. General Crafts (F, S)**
- 505c. Ceramics (F, S)**

506. Graduate Problems in Sculpture (1-3) F, S

Prerequisite: permission of the instructor. Intensive study with emphasis on planning, development, and evaluation of individual projects in sculpture. May be repeated to a maximum of 8 units but no more than 3 units of credit may be obtained in a single semester.

507. Graduate Problems in Drawing and Painting (1-3)

Prerequisite: permission of instructor. Intensive study with emphasis on planning, development, and evaluation of individual projects in the drawing and painting areas listed below. May be repeated to a maximum of 8 units but no more than 3 units of credit may be obtained in a single semester.

- 507a. Painting (F, S)**
- 507b. Life Drawing (F, S)**
- 507c. Drawing (S)**
- 507d. Printmaking (S)**

ART EDUCATION

IN THE DIVISION OF FINE AND APPLIED ARTS

(Offered by the Department of Art)

332. Industrial Arts for Elementary Teachers (2) F (Offered in alternate years)

Prerequisite: Ed. 311 or consent of the instructor. Creative selection, organization and use of materials and tools in construction activities. Includes correlation experiences with the social studies, science, and other units of work.

360. Elementary School Crafts (2) S (Offered in alternate years)

Studio activities and techniques of crafts appropriate to the elementary school. Strongly recommended for elementary teaching credential candidates.

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370A,B. Art Activity (2,2) F, S

Opportunities to observe, analyze, and evaluate child growth in and through creative art experiences.

429A,B. Arts and Crafts for Teaching Exceptional Children (2,2) (Offered in alternate years)

Methods of using a variety of art materials and processes with emphasis on those experiences which meet the needs of retarded or handicapped children.

432. Teaching Art in the Elementary School (2) F, S

Prerequisite: Ed. 311, Art 100 or the equivalent, or consent of the instructor. Objectives and methods of the elementary art program. Studio activities, creative experience and techniques appropriate to the elementary school. Lectures and studio projects. Required of elementary teaching credential candidates.

442. Teaching Art in the Secondary School (2-3) F

Prerequisites: Education 311, Education 300, senior standing, or consent of the instructor. Objectives, methods, and materials for teaching art in secondary schools. Required, before student teaching, of students presenting majors in art for the General Secondary Credential. Students without teaching experience must register for three units credit, and must allow sufficient time in their schedules, at the same hour each day, so they can serve as teacher aides in high school.

BIOLOGICAL SCIENCE

IN THE DIVISION OF SCIENCE AND MATHEMATICS

100. Principles of Biology (2) F, S

An introduction to basic concepts of structures and function in living organisms and to modern biological problems. Required of all Biology majors. Concurrent enrollment in Bio. Sci. 140 (3) or Bio. Sci. 160 (3) is suggested. (2 hours lecture per week.)

140. Principles of Botany (3) F, S

Prerequisite: Bio. Sci. 100 (concurrent enrollment recommended). Emphasis will be placed on the dynamic aspects of botany although the traditional areas of morphology and classification will not be neglected. (2 hours lecture, 3 hours laboratory per week.) This course is designed to integrate with Bio. Sci. 100: Principles of Biology. Required of all Biology majors.

160. Principles of Zoology (3) F, S

Prerequisite: Bio. Sci. 100 (concurrent enrollment recommended). An introduction to the principles of animal biology with special reference to the structure, classification, physiology, behavior and ecology of animals. This course is designed to integrate with Bio. Sci. 100: Principles of Biology. Required of all Biology majors. (2 hours lecture, 6 hours laboratory per week.)

201. Field Biology (3) S

Prerequisite: 1 year of biological science and/or permission of instructor. A course for non-majors designed to acquaint the interested study with the plant and animal life of this region. (1 hour lecture, 6 hours laboratory per week.) Several week-end field trips will be arranged to study different biotic communities.

311. General Microbiology (4) F

Prerequisite: 1 year of college biology. Consideration of the diverse biological characteristics of bacteria and other microorganisms will be extended to study of these life forms as agents of change in natural processes. The laboratory will introduce the methods used to study microbes and will demonstrate the roles of microbes in agriculture, industry and in health. (2 hours lecture, 6 hours laboratory per week.)

312. Genetics Lecture (3) S

Prerequisite: 1 year of college biology or permission of the instructor. The general principles and modern developments in the study of heredity. (3 hours lecture per week.)

312L. Genetics Laboratory (1) S

Prerequisite: Bio.Sci. 312 (may be taken concurrently). (3 hours laboratory per week.)

342. Plant Anatomy (4) F

Prerequisite: General Botany or 1 year of college biology. The origin, development, and maturation of leaves, stems, roots, and flowers of vascular plants. (2 hours lecture, 6 hours laboratory per week.)

343. Plant Microtechnique (2) S

Prerequisite: Biological Science 140 or permission of the instructor. Theory and practice of the preparation of plant cells, tissues and organs for microscopic study. (6 hours laboratory per week.)

344. Plant Morphology (4) S

Prerequisite: General Botany or 1 year of college biology. A study of the morphology and classification of the lower plant groups and a general survey of the major groups of plants exclusive of angiosperms and gymnosperms. (2 hours lecture, 6 hours laboratory per week.)

361. Mammalian Anatomy and Physiology (4) S

Prerequisite: 1 year of college biology or permission of instructor. Study of the structure and function of the human organism. (2 hours lecture, 6 hours laboratory per week.)

362. Animal Histological Technique (2) S

Prerequisite: 1 year of college biology or permission of instructor. Theory and practice of the preparation of animal cells and tissues for microscopic study. (6 hours laboratory per week.)

363. Wildlife and Conservation (3) S

Prerequisites: Biological Science 140 and 160 or equivalents or permission of instructor. A study of the relationship of land, water and wildlife with an analysis of management techniques. Three hours lecture per week.

400. Undergraduate Problems in Biology (1-3) F, S

Open to advanced standing students in Biology by permission of a staff member only. May be repeated for credit.

401. Biogeography (3) S

Prerequisites: Biological Science 140 and 160 or equivalents or permission of instructor. A study of the present day distribution of plants and animals based upon classification, fossil records, morphology and geography. Three hours lecture per week.

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412. Cell Physiology and Metabolism (2) F

Prerequisites: 1 year of college biology and 1 semester of organic chemistry or permission of the instructor. Characteristics of life at the cellular level; processes by which the cell obtains energy and material and forms new cell substances; control of these processes by the cell; organization of structures and enzyme systems within the cell. (2 hours lecture per week.)

412L. Cell Physiology Laboratory (2) F

Prerequisite: Bio.Sci. 412. (may be taken concurrently). (6 hours laboratory per week.)

413. Basic Pathogenic Microbiology (2) S

Prerequisite: 1 semester of microbiology or bacteriology. Selected topics in the biology of infectious disease: A biological view of parasitism, pathogenicity of the microorganisms, and defenses of the host, the microbiological bases of disinfection, chemotherapy and antibiotic therapy. (2 hours lecture per week.)

413L. Pathogenic Microbiology Laboratory (2) S

Prerequisite: Bio.Sci. 413 (may be taken concurrently) or permission of the instructor. (6 hours laboratory per week.)

414. Immunology (4) F

Prerequisites: Biological Science 413 or equivalent, or permission of the instructor. Study of the nature of antibodies and antigens, their role in immunity, and the specificity of their reactions. Laboratory experiments will show the kinetics of antibody formation and the mechanisms of antibody-antigen reactions. Techniques in serodiagnosis will be performed. (2 hours lecture, 6 hours laboratory per week.)

424. Evolution (3) S

Prerequisite: 1 year of college biology or permission of the instructor. A study of evolution, including the history of evolutionary thought; origin of universe, earth and life; geological and paleontological history of the earth; evidences for evolution derived from comparative anatomy, embryology, genetics, zoogeography; mechanisms of evolution. (3 hours lecture per week.)

424L. Evolution Laboratory (1) S

Prerequisite: Biology 424 (may be taken concurrently). (3 hours laboratory per week.)

425. Marine Biology (4) F

Prerequisites: Bio.Sci. 100 and Physical Science 201 or equivalent, or permission of the instructor. Physical and chemical aspects of the ocean as a background for the study of marine organisms and habitats, including a study of currents, tides, food cycles, productivity, biotic associations, succession, and communities. Habits, identification, ecology. methods of collecting, preserving and maintaining alive local marine algae, invertebrates, and fish. (2 hours lecture, 6 hours laboratory or field work per week.)

436. Microbial Growth and Physiology (4) S

Prerequisites: A course in microbiology or bacteriology and a course in chemistry. An advanced treatment of the structure, physiology, growth and ecology of the microorganisms, with emphasis on study of the free-living bacteria, yeasts and molds. (2 hours lecture, 6 hours laboratory.)

441. Plant Taxonomy (4) S

Prerequisite: General Botany or 1 year of college biology. An introduction to the study of classification of conifers and the flowering plants through field collecting and laboratory study and identification of representative kinds. (2 hours lecture, 6 hours laboratory per week.)

443. Plant Ecology (4) S

Prerequisite: Plant Taxonomy 441. Relation of plants to their environment with emphasis on climatic and soil factors influencing their structure, behavior, and distribution. (2 hours lecture, 6 hours laboratory per week.)

444. Plant Physiology (4) S

Prerequisites: General Botany and 1 semester of organic chemistry or permission of the instructor. A study of plant growth, nutrition, food synthesis, and metabolism. (2 hours lecture, 6 hours laboratory per week.)

452. Economic Botany (3) F

Prerequisites: Biological Science 140 or permission of the instructor. An examination of man's dependence upon and economic interest in plants throughout the world. (3 hours lecture per week.)

461. Invertebrate Zoology (4) F

Prerequisites: Biological Science 160, or a year of college biology or permission of instructor. Evolution, classification, physiological adaptations, and biology of invertebrate animals. Includes dissection, identification and observation of living animals. 2 hours lecture, 6 hours laboratory or field work per week.

463. Comparative Vertebrate Anatomy (4) F

Prerequisite: A year course in general zoology or biology, or permission of the instructor. A comparative study of the chordates, with emphasis on morphology and evolution of various organ systems from fish through mammals. Includes thorough dissection of dogfish, *Necturus*, and cat. (2 hours lecture, 6 hours laboratory per week.)

464. Embryology (4) F

Prerequisite: A year course in general zoology or biology or permission of the instructor. Study of development from fertilization through organogenesis with laboratory work on the frog, chick, and pig. (2 hours lecture, 6 hours laboratory per week.)

465. Animal Ecology (4) F

Prerequisite: Three semesters of college biology or permission of the instructor. A survey of the physical, chemical, and biological factors of the environment as they affect the distribution and mode of life of animals. (2 hours lecture, 6 hours laboratory per week.)

467. Entomology (4) S

Prerequisite: Biological Science 160, or a year of college biology or permission of instructor. Anatomy, physiology, evolution, and biology of insects and other terrestrial arthropods. Laboratory includes detailed dissection, collection, identification, and observation of living arthropods. 2 hours lecture, and 6 hours laboratory or field work per week.

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471. Natural History of the Vertebrates (4) S

Prerequisites: 1 year of college biology; comparative vertebrate anatomy, or permission of the instructor. Natural history, behavior, distribution, and ecology of the vertebrates. Laboratory and field emphasis on identification, behavior, maintenance of living and preserved animals. (2 hours lecture, 6 hours laboratory or field work per week.)

500. Graduate Problems in Biology (1-3) F, S

Open to graduate students only by permission of a staff member. May be repeated for credit.

BUSINESS ADMINISTRATION AND ECONOMICS

Courses in Business Administration and Economics appear under headings as listed on the following pages: Accounting, 113; Business Education, 124; Economics, 129; Finance, 137; Management, 149; Marketing, 151; Quantitative Methods, 173.

The following two courses are offered in all departments:

597. Project (3) F, S

Open to qualified graduate students. Directed independent inquiry.

598. Thesis (3-6) F, S

Open to qualified graduate students. Directed independent inquiry. Student will select and have approved a thesis topic, show evidence of original research, and must present himself for a defense of the thesis before a faculty committee.

BUSINESS EDUCATION

IN THE DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

442. Teaching Business in the Secondary School (2-3) F

Prerequisites: Education 311, admission to teacher education. Principles, methods, and materials of teaching business subjects in secondary schools.

CHEMISTRY

IN THE DIVISION OF SCIENCE AND MATHEMATICS

101A,B. General Chemistry (5,5) F, S

Prerequisites: High school algebra and either high school physics or high school chemistry. The fundamental principles of chemistry with emphasis on the chemistry of inorganic compounds. Quantitative methods are introduced during the second semester. (3 hours lecture, 6 hours laboratory per week.)

201. Modern Physical Science (4 or 5) F, S. (See course description under Physical Science).

211. Quantitative Analysis (4) F

Prerequisite: Two semesters of college chemistry. Stoichiometry and the fundamentals of volumetric and gravimetric analysis. (2 hours lecture, 6 hours laboratory per week.)

212. Quantitative Chemistry (4) S (Formerly 211B)

Prerequisites: Chemistry 101A,B or Chemistry 211. Modern analytical chemistry including contemporary wet chemical methods in aqueous and non-aqueous media and an introduction to instrumental methods of analysis in electrochemistry, spectrophotometry and radiochemistry. (2 hours lecture, 6 hours laboratory per week.)

251. Elementary Organic Chemistry (4) F, S

Prerequisite: One year of college chemistry. A course for non-chemistry majors designed to provide an introduction to the properties, methods of preparation, and reactions of the more important classes of organic compounds, including the aliphatic and aromatic hydrocarbons, alcohols, acids, aldehydes, ketones, amines, and halides. (3 hours lecture, 3 hours laboratory per week.)

301A,B. Organic Chemistry (4,4) F, S

Prerequisite: Chemistry 101A,B or equivalent. The classification, fundamental theories, preparation, and properties of the carbon compounds are discussed. Experiments illustrating the properties and preparative methods of representative aliphatic and aromatic compounds are performed in the laboratory. (3 hours lecture, 3 hours laboratory per week.)

302A,B. Organic Chemistry Laboratory (1,1) F, S

Taken concurrently with Chemistry 301A,B. Additional experiments in organic chemistry. Recommended for Chemistry majors. (3 hours laboratory per week.)

371A,B. Physical Chemistry (3,3) F, S

Prerequisites: Calculus, college physics, and two years of college chemistry. A study of the fundamental laws and theories of chemistry. Thermodynamics, solutions, chemical and phase equilibria, electrochemistry, atomic and molecular structure, and kinetics are covered. (3 hours lecture per week.)

401. Organic Preparations (2-3) S

Prerequisite: Chemistry 301A,B or equivalent. Laboratory exercises using advanced methods and techniques for the preparation of organic compounds. Library work required. (6 or 9 hours of laboratory per week.)

403. Characterization of Organic Compounds (4) F

Prerequisite: Chemistry 301A,B or equivalent. The identification of organic compounds as pure substances or in mixtures. (2 hours lecture, 6 hours laboratory per week.)

411. Instrumental Analysis (4) F

Prerequisites: Chemistry 212, 301A,B or equivalent. Utilization of modern instruments in the solution of analytical problems (2 hours lecture, 6 hours laboratory per week.)

421. Inorganic Preparations (2,3) F

Prerequisites: Chemistry 212 and 301A. Laboratory exercises in the preparation of inorganic compounds. Library work required. (6 or 9 hours laboratory per week.)

425. Advanced Inorganic Chemistry (3) F, S

Prerequisites: Chemistry 101A,B or equivalent, Chemistry 301A,B, and concurrent enrollment in Chemistry 371A,B. An introduction to molecular orbital theory, ligand field theory, mechanisms of inorganic reactions, the coordination chemistry of transition metal complexes and organometallic compounds. (3 hours lecture per week.)

441. Physical Chemistry Laboratory (3) F, S

Prerequisite: Chemistry 371A,B. May be taken concurrently with Chemistry 371B with the permission of the instructor. Laboratory exercises illustrating the physical principles of chemistry. (1 hour lecture, 6 hours laboratory per week.)

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451. Advanced Physical Chemistry (3) F

Prerequisite: Chemistry 371A,B. An introduction to the application of quantum mechanics and statistical mechanics in chemistry. (3 hours lecture per week.)

461. Chemical Thermodynamics (3) S

Prerequisite: Chemistry 371A,B. The application of thermodynamic principles to chemical processes.

471. Chemical Constitution (3) F

Prerequisite: 2 years of college chemistry or permission of the instructor. Advanced discussion of topics related to the chemical bond. The periodic system, bond types, and the structure of molecules and crystals. (3 hours lecture per week.)

472. Chemical Crystallography (3) S

Prerequisite: 1 year each of college chemistry and physics or permission of the instructor. The fundamentals of crystallography, X-rays and X-ray diffraction, and crystal chemistry. (3 hours lecture per week.)

491. Chemical Literature (1) F, S

Prerequisite: Upper division standing. An introduction to the types and use of chemical literature. (1 hour lecture per week.)

495. Senior Research (1-3) F, S

Prerequisite: Consent of supervising instructor. Open only to students with a B average in chemistry. An introduction to the methods of chemical research through a research project carried out under the supervision of one of the Chemistry Department faculty. May be repeated for credit.

499. Independent Study (1-3) F, S

Study of some special topic in chemistry, selected in consultation with the instructor and carried out under his supervision. May be repeated for credit.

COMPARATIVE LITERATURE

IN THE DIVISION OF HUMANITIES

312. The Bible as Literature (3) F, S

Study of the Old and New Testaments as literary art; the evolution of major ideas in Old and New Testament literature; the influence of the Hebraic-Christian tradition in shaping the values of Western civilization.

315. Classical Mythology in World Literature (3) F

The origins, elements, forms and functions of Classical mythology in works from the earliest times to the present.

332. Medieval Literature of Western Europe (3) S

Representative works in translation, from Beowulf to Dante.

333. Literature of the Renaissance (3) F

Major phases of the Renaissance as a literary movement, from Erasmus to Montaigne and Cervantes.

351. Masters of World Drama (3) F

Reading, discussion, and interpretation of outstanding plays in translation with a view toward determining some principles of the dramatic art. Emphasis on major figures from Aeschylus to Brecht.

353. Masters of World Fiction (3) S

Reading, discussion, and interpretation of outstanding novels in translation with a view toward determining some principles of the narrative arts. Emphasis on Goethe, Stendahl, Flaubert, Tolstoy, Mann, Kafka, Proust, and others.

373. Masters of Russian Literature (3) S

Reading, discussion, and interpretation of selected works by Pushkin, Dostoyevsky, Tolstoy, Chekhov, Pasternak, and others, and their relationship to Western literature.

375. Hispanic Literature and Culture (3) S

A survey of Hispanic contributions to world culture, with emphasis on understanding contemporary Latin American civilization.

425. Literary Masterpieces of the Orient (3) F

A study of selected works from Indian, Chinese and Japanese literature and their significance in the light of Western thought.

DRAMA

IN THE DIVISION OF FINE AND APPLIED ARTS

211. Introduction to Oral Interpretation (3) F, S

Prerequisite: Speech 101, a high school speech course, or consent of instructor. A fundamentals course devoted to theory, methods, and practice in the performance of oral communication of different types of literature. (Same as Speech 211)

271. Introduction to Theatre Arts (3) F, S

A study of the evolution of theatre, motion-pictures, radio and television as composite arts. Emphasis is placed on the visual and production aspects as influenced by different cultures, traditions, and technologies. Field trips to certain significant productions.

272. Understanding Theatre (3) S

A non-technical survey course for the general student leading to an appreciation and understanding of the theatre as a medium of communication and entertainment and as an art form. Field trips to certain significant productions.

273A,B. Acting (3,3) F, S

Theories of style and the visual aspects of characterization appropriate to the demands of major world dramaturgy. Practice of techniques in the art of acting.

276A,B. Beginning Stagecraft (2,2) F, S

Theory and practice in the technical crafts of the theatre in the interrelation of the execution of design, construction, painting, makeup, lighting, and costuming the play.

311. Oral Interpretation (3) F, S

Prerequisite: Drama 211 or Speech 211 or consent of instructor. The principles and practice of reading aloud from the printed page. Analysis of selections from prose and poetry are emphasized. The development of voice control and projection of idea and motion. (Same as Speech 311)

314. Reading Theatre (3) F, S

Prerequisite: Drama 211 or 311 or Speech 211 or 311. Oral reading in which the emphasis is placed on theory and practice of group and individual reading dramatic literature.

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374A,B. Dance Theatre and Production (2,2) F, S

Prerequisite: Physical Education 143 or the equivalent or consent of instructor. Theory and practice of creative and expressive movement in relation to the theatre and dance production.

376A,B. Stagecraft (2,2) F, S

Technical theatre practices including study of design, equipment, construction, scene painting, stage make-up, lighting, and costuming. Experience is provided in the actual mounting of plays.

378A,B. Experimental Theatre (3,3) F

An activity course in which dramatic principles are applied through production of full length and one-act plays using various styles of acting and staging. Opportunities are given for student directors to prepare and to present experimental productions for invited audiences.

379A,B. Play Production (3,3) S

Theory and practice in the rehearsal and performance of various types of dramatic works. Entire production and group scenes are prepared for invited audiences and for the general public.

380. Introduction to Radio and Television (3) F

The history and development of the broadcasting industry and its impact and influence on our society. A study of the basic broadcasting practices, audiences, production and programming. (Same as Journalism 380)

382. Television Techniques (3) F, S

Survey of the development and current trends in television techniques, programming, and production.

383. Radio and Television Writing (3) S

Study of the principles and practices and experience in the writing of scripts and other forms of continuity for both radio and television.

402. Dramatic Activities for Children (3) F, S

Theory and practice in the use of creative dramatics, storytelling, puppetry, assembly programs, role-playing, and other aspects of dramatics as tools for the teacher, group worker, recreation major, and others who work with children.

470A,B. Directing (3,3) F, S

Theory and practice in the directing of scenes and one-act plays under faculty supervision. With consent of the department, a second semester student may direct a three-act play.

473. Analysis of Drama (3) F

Nature and purpose of drama as a living art. A study of the changing forms in the theatre in production and the influence of these forms on the culture of the time.

474. Special Studies in Dance Theatre and Production (1,3) F, S

Prerequisites: Drama 374A,B or the equivalent and consent of instructor. Opportunity for intensive study in theory and practice in Dance Theatre and Production. May be repeated to a maximum of eight units but no more than three units of credit may be obtained in a single semester.

475A,B. History of the Theatre (3,3) F, S

Development of the physical stage, styles of acting, makeup, costuming types, and forms of drama from ancient to modern times. (A) From Ancient Greece through the mid-nineteenth century; (B) From Ibsen to the present including history of theatre in America.

484. Educational Television Production (3) F, S

Theory and practice in the activities, methods of lesson preparation, and presentation of educational television productions.

499. Independent Study (1,3) F, S

Open to advanced students in Drama with the consent of the department chairman. May be repeated for credit.

ECONOMICS

IN THE DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

100. American Economic History (3) F, S

The evolution of American economic institutions and their relation to the development of industry, commerce, transportation and finance.

200. Principles of Economics (5) F

An introduction to the principles of economic analysis and policy including the central problem of scarcity, basic economic institutions of the United States, resource allocation and income distribution, economic stability and growth, and the role of public policy. Open only to junior transfers.

200A. Principles of Economics (3) F, S

The first half of a two-semester sequence. An introduction to the principles of analysis and policy including the central problem of scarcity, basic economic institutions of the United States. Emphasizes economic stability and growth and the role of public policy.

200B. Principles of Economics (3) F, S

Prerequisite: Economics 200A, or equivalent. The second half of a two-semester sequence. Continuation of an introduction to the principles of economic analysis and policy. Emphasizes resource allocation and income distribution, international economics, comparative economic systems, and the role of public policy.

201. The American Economy (3) F, S

A survey of the basic economic concepts and processes of a private enterprise economy. Included is a consideration of such topics as resource allocation, income distribution, problems of economic stability and growth and the appropriate role of government in a private enterprise society. Not open to students majoring in Business Administration and Economics.

300. Basic Economics (3) F, S (Open only to graduate students)

A concentrated study of the principles of economic analysis and policy and the basic economic institutions of the United States.

302. Intermediate Economic Analysis (3) F

Prerequisite: Economics 200, or 200A,B, or 201, or 300, or equivalent. A theoretical formulation of the principles of the determination of prices and output of goods and productive services in a market system.

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303. Intermediate Economic Analysis (3) S

Prerequisite: Economics 200, or 200A,B, or 201, or 300, or equivalent. A theoretical formulation of the principles of the determination of the level and fluctuations in real and money income, and the forces underlying economic growth.

322. European Economic History (3) F

Prerequisite: Consent of the instructor. The evolution of European economic institutions and their relation to the development of industry, commerce, transportation, and finance in the principal European countries.

324. Money and Banking (3) F, S

Prerequisite: Economics 200, or 200A,B, or 201. A study of the structure and operation of commercial banks and financial institutions including a consideration of the impact of money and capital market developments on economic activity. (Same as Finance 324.)

326. Labor Economics (3) F

Prerequisite: Economics 200, or 200 A,B, or 201. An analysis of the basic economic and institutional influences operating in labor markets. Considers relevant aspects of resource allocation, income distribution, economic stability, and growth.

362. Introduction to Econometrics (3) F, S

Prerequisites: Q.M. 361 (to have been taken or being taken concurrently) and Economics 200 A,B. An introduction to basic mathematical tools and their application in economic analysis. The measurement and verification of economic relationships by statistical methods. Consideration of some econometric models. (Same as Quantitative Methods 362)

401. Government and Business (3) S

Prerequisites: Economics 200, or 200 A,B, and 302. An economic study of business organization, conduct and performance followed by an analysis of the rationale and impact of public policy on various segments of business and business activities, including the regulated industries, sick industries, and antitrust policy.

402. Monetary and Fiscal Policy (3) F

Prerequisites: Economics 200, 302. A study of the techniques of monetary and fiscal policy and an appraisal of their relative roles in promoting economic stability and growth.

403. Comparative Economic Systems (3) F, S

Prerequisites: Economics 200, 301, or consent of the instructor. An analytical comparison of unplanned and planned systems of economic organization as to their theoretical foundations, existing economic institutions, and achievements and failures; capitalism, socialism, communism, and fascism will be examined as exemplified by the United States, England, Russia and pre-war Germany.

404. The Soviet Economy (3) S

Prerequisite: Economics 200, or 200 A,B, or 201. An analytical evaluation of Soviet economic development including the structure and performance of the Soviet economy and problems of planning and control.

405. History of Economic Thought (3) S

Prerequisites: Economics 302, 303. A study of the development of economic thought as reflected in the evolution of major schools of thought and of leading individual economists as they influenced economic thought and policy.

421. International Trade (3) F

Prerequisite: Economics 200, or 200 A,B, or 201. An examination of the theory of international trade and the means and significance of balance of payments adjustments, with an analysis of past and present developments in international commercial and monetary policy. (Same as Marketing 421)

431. Economic Development: Analyses and Case Studies (3) S

Prerequisites: Economics 200, or 200 A,B, or 201, and consent of instructor, or equivalent. An examination of the processes of economic growth with special reference to developing areas. Considers capital formation, resources allocation, relation to the world economy, economic planning, and institutional factors, with appropriate case studies.

451. Economics of Taxation (3) S

Prerequisite: Economics 200, or 200 A,B, or 201. A study of government finance at the federal, state, and local levels with particular reference to administrative problems of public finance, the ethical aspects of taxation, and the impact of taxation and spending on resource allocation and income distribution.

452. Economics of Location (3) S

Prerequisite: Economics 200, or 200 A,B, or 201. The theory and principles underlying the location of economic activity.

499. Independent Study (3) F, S (Formerly 498)

Prerequisites: Economics major or concentration, senior standing and approval by the department chairman. Open to qualified undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit.

510. Competition, Monopoly, and Public Policy (3) S

Prerequisite: Economics 200, or 300, or 302. An examination of the economic implications of various forms of market structure and business conduct and considers the application of public policy to various segments of business and business activities, including antitrust policy and regulation of business.

511. Economic Problems and Public Policy (3) F

Prerequisite: Economics 200, or 300, or 303. An examination of the nature and implication of the major economic problems facing the economy and an evaluation of current and alternative policies for their solution. Problems considered will include price level stabilization, balance of payments equilibrium, economic growth, and cyclical and technological unemployment.

EDUCATION

**FOUNDATIONS OF EDUCATION
IN THE DIVISION OF EDUCATION**

(See also School Services and Secondary Education)

301. Social Foundations of Education; Historical, Philosophical Foundations of Education (4) F, S

Prerequisite: Admission to teacher education or consent of the instructor. Survey of social, historical, and philosophical foundations of education from ancient times to the present, discussed in the light of their effect upon modern educational theory and practice.

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311. Psychological Foundations of Education (4) F, S

Prerequisite: Psych. 101. Prerequisite to other courses in the professional education sequence. Learning theory, thinking processes, and human growth and development. Requires laboratory assignment.

312. Human Growth and Development (3) F, S

Prerequisite: Psych. 101. A comprehensive study of human growth and development with emphasis on childhood, adolescence, and middle and old age. Includes mental, social, emotional, and physical development.

402. Comparative Education (3) F

Prerequisite: Educ. 331 or Educ. 441 or consent of the instructor. A study of (1) problems, factors and efforts in education throughout the world, and (2) the philosophies and practices in administration, control, financing and operation of educational systems of selected areas and countries.

403. History of Education (3) F

Prerequisites: History of World Civilization and Educ. 331 or Educ. 441, or consent of the instructor. The main streams of educational history in Europe and America, with particular emphasis on the ways these main streams have affected the current scene in the United States.

406. Educational Sociology (3) S

Prerequisite: Educ. 331 or Educ. 441, or consent of the instructor. The school in the social order; analysis of cultural factors affecting school, and of the special culture of the school; consideration of research in selected areas of the school-culture relationship.

501. Philosophy of Education (3) F, S

Prerequisites: Postgraduate standing and Educ. 339 or Educ. 549, or consent of the instructor. Uses of theories of knowledge, value and reality in dealing with educational problems; application of contemporary systems of thought to education.

503. Foundations for Educational Leadership (3) F, S

Prerequisite: Consent of the instructor. The cultures and values to which schools must contribute: introduction to community sociology, tax systems and public administration; the literature of leadership. Screening for admission to program. Occasional special meetings. Required of all students during first registration in school administration and supervision at this college.

505. Foundations for Improving Instruction (4) F

Prerequisite: Educ. 503. The development of a quality program of instruction in both elementary and secondary schools; appraisal of programs of instruction; advanced principles of curricular review and modification.

Evaluation of subject matter competence in area of supervisory specialization. Meets credential requirements in principles of curriculum construction and evaluation; supervision of instruction and curriculum in both elementary and secondary schools.

511. Survey of Educational Research (2) F

Prerequisites: Educ. 451 or equivalent; teaching experience. Review of descriptive statistics as applied to educational problems. Survey of elements of current research types. Principles of research design.

ELEMENTARY EDUCATION

331. Elementary School Principles, Curricula, and Methods (8) F, S

Prerequisites: Educ. 311, Engl. Educ. 433, Art 380, Music 333, P.E. 432, and admission to teacher education. Principles, curricula, methods, and materials of elementary school instruction, with major emphasis on reading, language arts, arithmetic, social studies, and science. Includes audio-visual instruction, methods, and techniques. Required field work. Required of all candidates for the Standard Teaching Credential with Specialization in Elementary School Teaching or its equivalent. (6 hours lecture, 2 hours activity, and 3 hours laboratory per week.)

339. Student Teaching in the Elementary School and Student Teaching Seminar (10) F, S

Prerequisites: Educ. 331 and admission to student teaching. Participation in a regular elementary school teaching program for the greater part of every school day. Includes a two-hour seminar each week in problems and procedures of elementary school teaching. Concurrent enrollment in other professional education courses is discouraged. (Beginning in the 1965 fall semester this course will carry 8 units.)

431. Principles and Curricula of the Elementary School (2) F, S

Prerequisite: Educ. 311 or consent of the instructor. An introductory course in elementary education. Stress on major principles and basic curricular considerations. Importance of the elementary school system to society.

432. Teaching—in the Elementary School

Prerequisites: Educ. 311 or consent of the instructor. A series of courses, listed dually in the Division of Education and in the other appropriate divisions, dealing with objectives, methods, and materials of teaching the various subjects and areas in the elementary schools. The courses are professional education courses and applicable toward credential requirements. Detailed descriptions of the courses are to be found in the materials of other departments and divisions within this catalog.

For. Lang. Ed. 432. Teaching Foreign Languages in the Elementary Schools (2) F, S

The following courses have been designed specifically for students who have completed the major portion of Education 331 or who are part-time students. With the approval of the professional adviser the requirement of Education 331 may be partially satisfied with these courses.

Educ. 432R. Teaching Reading in the Elementary School (2) F, S

Eng. Ed., 432. Teaching Language Arts in the Elementary School (2) F, S

Math. Ed. 432. Teaching Mathematics in the Elementary School (2) F, S

Sci. Ed. 432. Teaching Science in the Elementary School (2) F, S

Soc. Sci. Ed. 432. Teaching Social Sciences in the Elementary School (2) F, S

432R. Teaching Reading in the Elementary School (2) F, S

Prerequisite: Educ. 311 or consent of the instructor. Reading process, sequential development of reading skills, relationship of developmental reading to child growth and development, and place of reading in the culture.

437. Problems in Early Elementary Education (3) S

Prerequisites: Educ. 339 and consent of instructor. Study of current literature and recent research in the area of education of young children through individual and group study. Emphasis will be placed on problems centered in cognitive processes, content structure and instruction at the early elementary education level.

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481. Analysis of Reading Difficulties (3) F, S

Prerequisite: Educ. 339 and consent of the instructor. Analysis and diagnosis of reading difficulties. Psychological bases of the reading process. Techniques and methods of prevention and treatment.

537. Seminar for Elementary Education (3) S

Prerequisite: Educ. 339 or consent of the instructor. Persistent problems in elementary education and survey of literature; causes and solutions for these related problems. Application of scientific method to educational problems, sources of education research, and to techniques of cooperative thinking.

ENGLISH

IN THE DIVISION OF HUMANITIES

For World Literature in English translation see courses under COMPARATIVE LITERATURE.

101. Composition and World Literature (3) F, S

Analytical and critical writing based on the study of representative works from Classical and Biblical literature to the Renaissance.

102. World Literature and Composition (3) F, S

Prerequisite: English 101 or the equivalent. The study of representative works from the Renaissance to the modern age, as a basis for continuing practice in analytical and critical writing.

201. Analysis of Literary Forms (3) F, S

The main literary forms—prose fiction, poetry, and drama—are studied and analyzed. Various critical methods are applied to representative works mainly from English and American literature. Especially recommended for prospective teachers of literature.

202. The Development of the Short Story (3) F, S

Critical analysis of selected American and European short stories, aimed at an understanding of the structure and technique of the short story.

211. Masters of British Literature (3) F, S

An introduction to major periods and movements, major authors, and major forms. A concentrated course designed for students who are not majoring in English.

221. American Literature to Whitman (3) F, S

Emphasis on major writers: Hawthorne, Poe, Melville, Emerson, Thoreau, Whitman, and others.

222. American Literature from Twain to the Moderns (3) F, S

Emphasis on Twain, James, Crane, Hemingway, Faulkner, O'Neill, Frost, Eliot.

301. Advanced Composition (3) F, S

Designed to improve a writer's thinking and the thinker's writing.

303. The Structure of Modern English (3) F, S

Prerequisite: Junior standing. The grammar of contemporary English applied to problems in writing. Modern English usage. Strongly recommended for all teacher candidates.

333. Chaucer (3) F, S

Emphasis on *The Canterbury Tales*, read in Middle English. Close attention to the vocabulary, structure, and pronunciation of Chaucer's language, as indispensable to literary appreciation.

334. Shakespeare (3) F, S

Intensive study of selected major plays illustrating Shakespeare's development, dramatic art, and insight into human nature.

335. Elizabethan Drama (3) S

Prerequisite: English 334 or consent of the instructor. Marlowe, Kyd, Greene, Jonson, and others are studied as representative of dramatic trends in Elizabethan England.

336. Elizabethan Poetry and Prose (3) F

The poetry of Wyatt and Surrey, Jonson, Marlowe, Sidney, Spenser, and others; and the prose of Bacon, Greene, Lodge, Lyly, Nashe, and others.

341. Milton and the Seventeenth Century (3) F, S

A study of the development of Milton's art and of the ideological backgrounds of his thought. Includes also Donne, the metaphysical poets, the Cavaliers, Burton, Browne and Bunyan.

342. The Age of Reason in English Literature (3) F

Dryden, Swift, Pope, Johnson, Boswell, Addison, and Steele. The Restoration, the Age of Reason, and foreshadowings of Romanticism.

343. The Romantic Movement in English Literature (3) S

Burns, Blake; Wordsworth, Coleridge; Byron, Shelley, and Keats. The reaction against rationalism, the rise of revolutionary and liberal thought, humanitarianism, and emphasis on individual creativity.

344. Literature of the Victorian Period (3) F, S

Tennyson, Browning, Arnold, Rosetti, Swinburne, Morris, Pater, Wilde and others. The effort to synthesize rationalism, romanticism, and realism in an era of materialism and puritanism.

345. History and Development of the English Novel (3) F, S

From the Renaissance to the moderns, with emphasis on the eighteenth and nineteenth centuries: Defoe, Richardson, Fielding, Smollett, Austen, Bronte, Thackeray, Dickens, Eliot, Meredith, Hardy.

362. Seminar in Fiction Writing (3) F (Formerly 387B)

Prerequisite: Evidence of student's previous interest in creative writing and consent of the instructor. Study of superior models, development of style, and group criticism and evaluation of each student's independent work.

364. Seminar in Play Writing (3) S (Formerly 387A)

Prerequisite: Evidence of student's previous interest in creative writing and consent of the instructor. Study of superior models, development of style, and group criticism and evaluation of each student's independent work.

366. Seminar in Poetry Writing (3) S (Formerly 387C)

Prerequisite: Evidence of student's previous interest in creative writing and consent of the instructor. Study of superior models, development of style, and group criticism and evaluation of each student's independent work.

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368. Creative Writing Projects (3) S (Formerly 388)

Prerequisite: English 362, 364, 366, or consent of the instructor.

435. Shakespeare's History Plays and Comedies (3) S

An intensive study of the history plays and comedies, designed to provide a broader comprehension of Shakespeare's dramatic art, social and historical commentary, and human insight.

451. Contemporary Interpretations of Man (3) F, S (Formerly 411)

An interdisciplinary course stressing the dominant twentieth-century philosophical interpretations of man and the imaginative expression of those views in major literary works. (Also Philosophy 451)

462. Modern British and American Novels (3) F, S

Prerequisites: Survey of English, American, or World literature; an upper division literature course; or consent of the instructor. The development of modern British and American novels from 1900 to the present.

464. Modern British and American Drama (3) F, S

Prerequisites: Survey of English, American, or World literature; an upper division literature course; or consent of the instructor. The development of British and American drama from 1900 to the present.

466. Modern British and American Poetry (3) F, S

Prerequisites: Survey of English, American or World literature; an upper division literature course; or consent of the instructor. The development of British and American poetry from 1900 to the present.

490. History of the English Language (3) S (Formerly 454)

Prerequisite: Senior or graduate standing. The historical development of English vocabulary, phonology, morphology, and syntax from Indo-European to modern American English.

491. Senior Seminar: Studies in Chaucer (3) S

Prerequisites: English 333, B average or better, and consent of the instructor. Emphasis on Troilus and Criseyde and other works.

492. Senior Seminar: Studies in Renaissance Literature (3) S

Prerequisites: English 334, 335, 336, or 435, B average or better, and consent of the instructor. Directed research.

495. Senior Seminar: Studies in New England Transcendentalism (3) S

Prerequisites: English 221 and 222, B average or better, and consent of the instructor. Emphasis on the relationship between philosophy and literature.

496. Senior Seminar: Studies in the American Novel (3) S

Prerequisites: B average or better, English major, and consent of the instructor. Directed research.

498. Senior Seminar: Literary Criticism (3) F

Prerequisites: B average or better, English major, and consent of the instructor. Theory and application to selected texts.

499. Independent Study (3) F, S (Formerly 580)

Open to advanced students in English with the consent of the department chairman. May be repeated for credit.

570. Graduate Seminar: Problems in Language (3) F (Formerly 590)

572. Graduate Seminar: Problems in Shakespeare (3) F, S (Formerly 592)

573. Graduate Seminar: Milton (3) (Offered in alternate years)

574. Graduate Seminar: Coleridge and Blake (3) F

575. Graduate Seminar: Melville (3) S (Formerly 595)

576. Graduate Seminar: Twain (3) F (Formerly 596)

577. Graduate Seminar: Hawthorne and Faulkner (3) F

578. Graduate Seminar: Joyce (3) F (Formerly 598)

579. Graduate Seminar: Comparative Literature (3) S (Formerly 599)

580. Special Graduate Projects (3-6) F, S

Research projects in areas of specialization beyond regularly offered course work. Oral and written reports.

ENGLISH EDUCATION

IN THE DIVISION OF HUMANITIES

(Offered by the Department of English)

432. Teaching Language Arts in the Elementary School (2) F, S

Prerequisite: Education 311, admission to teacher education. The importance of the language arts to satisfactory personal, social, and professional life. Methods to help develop in children the skills needed for listening, speaking, reading, and writing are studied and their effectiveness evaluated.

433. Children's Literature (2) F, S

A study of masterpieces of the world's literature for children. Illustrates literary qualities appealing to children and demonstrates the ways in which children's literature reflects the particular cultural differences of the various Oriental, Classical and modern cultures.

442. Teaching English in the Secondary School (2-3) F, S

Prerequisites: Education 311, Admission to Teacher Education. Principles, methods, and materials of teaching English in the secondary school.

571. Graduate Seminar: Problems in the Teaching of Composition (3) F, S

FINANCE

IN THE DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

(Offered by the Department of Accounting and Finance)

324. Money and Banking (3) F, S

Prerequisite: Economics 200, or 200A,B, or 201. A study of the structure and operation of commercial banks and financial institutions including a consideration of the impact of money and capital market developments on economic activity (same as Econ. 324).

Orange State College

330. Business Finance (3) F, S (Formerly 332)

Prerequisites: Accounting 101B, or 200, and Economics 200, or 200B. Sources and uses of long-term and short-term capital in business firms, and analysis of business finance situations.

331. Financial Analysis (3) F, S

Prerequisite: Finance 330. The techniques of financial analysis and their application to business situations.

334. Principles of Insurance (3) S

Prerequisites: Economics 200, or 200B, and Quant. Meth. 361. Principles of life, casualty and liability insurance; individual and group insurance programs; methods of establishing risks and rates.

336. Principles of Real Estate (3) F

Prerequisite: Economics 200, or 200B. Survey of urban real estate principles and practices; structure and growth of cities; basis of real property values; real estate development and financing.

337. Real Estate Finance (3) S

Prerequisite: Finance 336. Instruments of real estate finance; factors affecting the supply and cost of real estate credit; primary and secondary mortgage markets; real estate as an investment medium.

431. Capital and Money Markets (3) F

Prerequisites: Finance 330, and either Economics 324 or Finance 324. Role of capital and money markets in the American economy; markets for new corporate and government issues; secondary markets; interrelation of financial institutions; factors influencing yields and security prices.

432. Investment Principles and Practices (3) F

Prerequisite: Finance 330. Principles underlying the selection and management of portfolios, analysis of different types of corporate securities—commercial, industrial, and public utility; the role of mutual funds and investment trusts.

433. Problems in Business Finance (3) S

Prerequisite: Finance 331. Comprehensive case studies including problems of estimating funds requirements, long-term financial planning, controlling and evaluating cash flows, and financing acquisitions and mergers.

499. Independent Study (3) F, S (Formerly 498)

Prerequisites: Senior standing and approval by the department chairman. Open to qualified undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit.

532. Corporate Financial Management (3) F, S

Prerequisite: Finance 330, and graduate standing. Financial policies and structure of corporations; acquisition and administration of funds; financial control.

533. Financial Administration (3) S

Prerequisite: Finance 532. Optimal financing and asset administration; advanced techniques of capital budgeting; application of analytical methods to the administration of the finance function of the business firm.

FOREIGN LANGUAGES EDUCATION

IN THE DIVISION OF HUMANITIES

(Offered by the Department of Foreign Languages and Literatures)

432. Teaching Foreign Languages in the Elementary School (2) F, S

Methods for teaching FLES: Foreign Languages in Elementary Schools. Critical review of materials, audio-lingual-visual aids, and current research. Conducted in English, with practice by students in the language they plan to teach.

442. Teaching Foreign Languages in the Secondary School (2-3) F

The theory and practice of language learning and language teaching with special emphasis on the audio-lingual method in combination with electro-mechanical aids. Conducted in English, with practice by students in the language they plan to teach.

FRENCH

IN THE DIVISION OF HUMANITIES

(Offered by the Department of Foreign Languages and Literatures)

101. Fundamental French (4) F

Listening-comprehension, speaking, reading-comprehension, and writing to develop control of the sounds and the basic forms and structure of French. (3 hours lecture-discussion, 2 hours laboratory.)

102. Fundamental French (4) S

Prerequisite: French 101 (or equivalent). Listening-comprehension, speaking, reading-comprehension, and writing to develop control of the basic forms and structure of French. (3 hours lecture-discussion, 2 hours laboratory.)

203. Intermediate French (3) F

Prerequisite: French 102 (or equivalent). Intensive practice in speaking, understanding, reading, and writing based on cultural and literary materials. Linguistic analysis from sound to sentence. (3 hours lecture-discussion, 1 hour laboratory.)

204. Intermediate French (3) S

Prerequisite: French 203 (or equivalent). Intensive practice in speaking, understanding, reading and writing based on cultural and literary materials. Linguistic analysis from sound to sentence. (3 hours lecture-discussion, 1 hour laboratory.)

315. Introduction to French Literature (3) F, S

Reading and discussion to develop insights into French literature and culture while strengthening facility with the language. Open to lower division students with the consent of the instructor. Conducted in French.

317. Advanced Grammar and Composition (3) F, S

Designed to give the student special competence in the control of French as an instrument for free oral and written expression. Open to lower division students with the consent of the instructor. Conducted in French.

351. French Literature to the Classic Age (3) F

Evolution of French literature and thought, through analysis of representative works, from the *chanson de geste* to the Baroque. Conducted in French.

361. French Literature Since the Age of Reason (3) S

The principal movements and authors of the 19th century (Romanticism, Realism, Naturalism, Symbolism), through analysis of representative works. Conducted in French.

Orange State College

400. French for Teachers (3) S

Intensive review of spoken French using recent developments in methodology and texts as subject materials.

451. French Classicism (3) F

Essence and evolution of *le classicisme*, studied principally in the works of the major 17th century authors (Corneille, Moliere, Racine, La Fontaine, La Rochefoucauld) and in the dominant genre (the theater). Conducted in French.

461. The Age of Enlightenment (3) S

Two complementary aspects of the 18th century: reason and feeling, the *philosophes* and the current of sensibility. Emphasis on major authors (Voltaire, Rousseau, Diderot, Marivaux, Laclos). Conducted in French.

466. Applied Linguistics in the Teaching of French (3) F (Formerly Foreign Languages Education 455)

Introduction to general linguistics with emphasis on the relation of speech and writing, the theory and practice of pronunciation, and the phonemic and morpho-phonemic structure of the language under study. (Same as German, Spanish 466)

471. Senior Seminar: Contemporary French Literature (3) F

The major figures of the 20th century, including the generations of Proust, Apollinaire, Malraux, Sartre and Robbe-Grillet. Conducted in French.

499. Independent Study (1-3) F, S (Formerly 480)

Supervised projects in French language or literature to be taken with the consent of the Department Chairman as a means of meeting special curricular problems. Selection of subject to be studied varies. May be repeated for credit.

557. Graduate Seminar: French Lyric Poetry (3) S

The evolution of the lyric from the Troubadours to the present, with emphasis on its changing form and function. Conducted in French.

GEOGRAPHY

IN THE DIVISION OF THE SOCIAL SCIENCES

111. General Physical Geography (3) F, S

A study of the basic elements of the physical environment (climate, land forms, water resources, vegetation, and soils) with particular emphasis on their world patterns and interrelationships.

121. Human Geography (3) F, S

Basic facts and concepts regarding the areal distribution and diversity of man, his settlements, his economies and his circulation patterns.

131. World Regional Geography (3) F, S

Man's distribution and activities within the framework of world geographic regions, with emphasis on the differing uses of various environments and the effects of geographic conditions on man. Not open to students who have had Geography 111 or Geography 121.

312. Geomorphology (3) F

Prerequisite: Geography 111. A study of the development of land forms and the processes which alter them, with emphasis on present landscapes in the United States and the interpretation of topographic maps.

323. Climatology (3) S

Prerequisite: Geography 111. A study of the basic climatological processes, climatic types and the importance of climate in the natural and cultural landscape.

333. Economic Geography (3) F, S (Formerly 203)

Prerequisites: Geography 111, 121, or consent of instructor. A study of the production and distribution of the world's agricultural, mineral and industrial commodities, and analysis of the related economic, political and physical factors.

343. Maps and Map Interpretation (3) F (Formerly 262)

Sources, evaluation, uses, and planning of various types of maps and graphic aids for teaching and research, with emphasis on the principles of effective cartographic representation.

353. Cartography and Design (3) S

Prerequisite: Geography 343 or consent of instructor. The design and construction of maps, charts, and graphs as geographic tools.

363. Geography of California (3) F, S (Formerly Geography 351)

Analysis of the geographic regions of California—their environmental diversity, settlement patterns, economic development, and current problems.

383. Conservation of Natural Resources (3) S

The principles of conservation and their application as they relate to soil, water, forests, minerals, and air, especially in the United States.

432. Geography of Anglo-America (3) F, S

Prerequisites: Geography 111, 121, or consent of instructor. A regional study of the United States and Canada emphasizing the interrelated physical and cultural features, that give geographic personality, both to the individual regions as well as the individual countries.

433. Geography of Europe (3) F, S

Prerequisites: Geography 111, 121, or consent of instructor. Description and analysis of physical environments and human occupation patterns in Europe west of the Soviet Union.

434. Geography of Latin America (3) F

Prerequisites: Geography 111, 121, or consent of instructor. A regional study of Middle and South American nations emphasizing interrelated physical and cultural characteristics, with attention given to special hemispheric relationships involving these countries and the United States and Canada.

435. Geography of Asia (3) F

Prerequisites: Geography 111, 121, or consent of instructor. A regional study of Asiatic nations, exclusive of the Soviet Union, showing the interrelationships of physical and cultural characteristics with special emphasis on the growing significance, in economic, social, and political terms, of such countries as China, India and Japan.

436. Geography of Africa (3)

Prerequisites: Geography 111, 121, or consent of instructor. A regional survey of the countries and colonies of Africa with special attention given to the rapid development of social, economic, and political conditions and problems.

Orange State College

438. Geography of the Soviet Union (3) F

Prerequisites: Geography 111, 121, or consent of instructor. The character of the bases for the regional diversity of man and land in the Soviet Union.

471. Urban Geography (3) F

Prerequisites: Geography 111, 121, or consent of instructor. The city as a geographic unit; urban settlements as regional centers; city-region relationships; the structure of villages, towns and cities, and their historical development; case studies.

481. Political Geography (3) S

Prerequisites: Geography 111, 121, or consent of instructor. The world political pattern with specific reference to politically organized areas as objects of geographic study.

499. Independent Study (1-3) F, S

Open to advanced students in Geography by permission of the chairman of the department. May be repeated for credit.

513. Seminar in Regional Geography (3) F

Prerequisite: Graduate standing or consent of instructor. A seminar on selected regions of the world. May be repeated for credit.

523. Seminar in Systematic Cultural Geography (3) S

A seminar on selected topics pertaining to the political, economic and social relationships in the geography of man. May be repeated for credit.

GERMAN

IN THE DIVISION OF HUMANITIES

(Offered by the Department of Foreign Languages and Literatures)

101. Fundamental German (4) F

Listening-comprehension, speaking, reading-comprehension, and writing to develop control of the sounds and the basic forms and structure of German. (3 hours lecture-discussion, 2 hours laboratory)

102. Fundamental German (4) S

Prerequisite: German 101 (or equivalent). Listening-comprehension, speaking, reading-comprehension, and writing to develop control of the basic forms and structure of German. (3 hours lecture-discussion, 2 hours laboratory)

203. Intermediate German (3) F

Intensive practice in speaking, understanding, reading, and writing based on cultural and literary materials. Linguistic analysis from sound to sentence. (3 hours lecture-discussion, 1 hour laboratory)

204. Intermediate German (3) S

Prerequisite: German 203 (or equivalent). Intensive practice in speaking, understanding, reading and writing based on cultural and literary materials. Linguistic analysis from sound to sentence. (3 hours lecture-discussion, 1 hour laboratory)

315. Introduction to German Literature (3) F

Reading and discussion to develop insights into German literature and culture while strengthening facility with the language. Open to lower division students with the consent of the instructor. Conducted in German.

317. Advanced Conversation and Composition (3) S

Designed to give the student special competence in the control of German as an instrument for free oral and written expression. Open to lower division students with the consent of the instructor. Conducted in German.

351. The Works of Lessing and Schiller (3) F

The major works of Lessing and Schiller illustrating their thought and art. Conducted in German.

361. The Works of Goethe (3) S

Selected works of Goethe illustrating his thought and art. Conducted in German.

400. German for Teachers (3) F, S

Intensive review of spoken German using recent developments in methodology and texts as subject materials.

451. German Literature to Goethe (3) F

Important works from the *Nibelungenlied* to *Faust* in the setting of their intellectual and historical climate. Conducted in German.

461. German Literature Since Goethe (3) S

Important works illustrating the development from Romanticism to Expressionism in the setting of their intellectual and historical climate. Conducted in German.

466. Applied Linguistics in the Teaching of German (3) F
(Formerly Foreign Languages Education 455)

Introduction to general linguistics with emphasis on the relation of speech and writing, the theory and practice of pronunciation, and the phonemic and morpho-phonemic structure of the language under study. (Same as French, Spanish 466)

475. Senior Seminar: The German Drama (3) S

The leading dramatists from Gryphius to Frisch, including works by Kleist, Grillparzer, Hebbel, Hauptmann, Brecht, with emphasis on various approaches to this genre. Conducted in German.

499. Independent Study (1-3) F, S (Formerly 480)

Supervised projects in German language or literature to be taken with the consent of the Department Chairman as a means of meeting special curricular problems. Selection of subject to be studied varies. May be repeated for credit.

571. The German Novelle (3) F

The German Novelle from Goethe to the present, including works by Kleist, Mann, Kafka, Dürrenmatt, Grass, with emphasis on the uniqueness of this genre. Conducted in German.

HEALTH EDUCATION

IN THE DIVISION OF EDUCATION

(Offered by the Department of Health Education, Physical Education, and Recreation)

HE 101. Personal and Community Health (2) F, S

Meaning and significance of physical, mental and social health as related to the individual and to society; alcohol and narcotics education; fire prevention; public safety and accident prevention.

HISTORY

IN THE DIVISION OF THE SOCIAL SCIENCES

110A. World Civilizations to the 17th Century (3) F

The story of man from the beginning of civilizations and historical records until the middle of the 17th century.

110B. World Civilizations from 1648 (3) S

The story of man from the end of the religious wars to the present. Deals with the rise of science, the Enlightenment, the Industrial Revolution, and the rise of the ideologies of the Twentieth Century.

170A. United States to 1877 (3) F

A survey of the political, social, economic, and cultural development of the United States from the discovery to 1877. Attention is given to the old world background, the rise of the new nation, sectional problems, and the Civil War and Reconstruction.

170B. United States Since 1877 (3) S

Survey of United States History since the period of Reconstruction, covering political, economic, social, and biographical subjects.

300. Africa and the Middle East Since 1945 (3) F (Formerly Social Sciences 330A)

A survey of the Middle East and Africa since 1945, concentrating on the development of their present civilizations, political and economic problems, and their place in world affairs.

301. Far East and Latin America Since 1945 (3) S (Formerly Social Sciences 330B)

A survey of present governments and civilizations in the Far East and Latin America, summarizing the background of present developments and problems in these areas.

340A. History of England and Great Britain (3) F

A study of the political, economic, and social history of England and her affiliated nations and territories from the earliest times to the later Stuarts. Particular stress is placed upon the growth of the parliamentary system of government and upon English overseas activities.

340B. History of England and Great Britain (3) S

A study of the political, economic, and social history of Great Britain from the later Stuarts to the present. Particular stress is placed upon the modification of the parliamentary system and the growth of economic and social democracy within Britain and upon the development of responsible political systems in the dependent territories.

350A. Colonial Latin America (3) F

A survey of the pre-Columbian cultures; the conquests by Spain and Portugal and the European background of these countries; the development of the socio-economic, cultural, and governmental institutions in colonial life; the background of revolutions and the wars for independence.

350B. Republican Latin America (3) S

A survey of the Latin American republics from 1826 to 1945 emphasizing the struggle for responsible government, socio-economic, and cultural changes, and the role of United States foreign policy.

381. Westward Movement in the United States (3) S

Prerequisite: History 170A-B or equivalent. A survey of the expansion of the United States population and sovereignty from the Piedmont to the Pacific, 1750 to 1900, and a history of regional development during the frontier period.

383. History of California (3) F

A survey of the political, economic, and social history of California from the aboriginal inhabitants to the present, tracing the development of contemporary institutions and the historical background of current issues.

399. Historiography (3) F

Introduction to historical methods and bibliography with a discussion of major historians and problems of historical interpretation. Required of history majors.

412. Ancient Near East (3) F

Prerequisite: History 110A. A study of the civilizations of ancient Egypt, Mesopotamia, and the lands neighboring them. This course covers the prehistoric cultures, the growth of civilizations, and the competition and mutual influences among them to the time of Alexander; considerable attention is given to the background of Judaeo-Christian ideas and to the indebtedness of later peoples to these early societies.

415. Ancient Greece (3) F

Prerequisite: History 110A. A study of the civilization of ancient Greece. This course covers the prehistoric Aegean cultures, the classical city-states, and the Hellenistic Age; considerable attention is devoted to the literary and philosophic contributions to our modern civilization.

417. Ancient Rome (3) S

Prerequisite: History 110A. A study of the civilization of ancient Rome. Political institutions are emphasized from the earliest times to Christianization of the Empire in 325 A.D.; attention is also given to the rise of Christianity.

423A. Early Middle Ages, 325-1095 (3) F

Prerequisite: History 110A. History of Europe from Constantine to the eve of the Crusades. The course covers the transformation of European society and culture through the Barbarian invasions, the Byzantine and Islamic cultures, and the establishment of the feudal order in Western Europe.

423B. Later Middle Ages, 1095-1400 (3) S

Prerequisite: History 110A. History of Europe from the Crusades to Dante, emphasizing the political, economic, literary, and artistic changes of the period.

425. Renaissance and Reformation, 1400-1648 (3) F

History of Europe from the end of the Middle Ages through the classical revival, the Protestant revolt, and the Thirty Years' War to the Peace of Westphalia, 1648.

426. Rise of Modern Europe, 1648-1815 (3) S

Prerequisite: History 110B. European diplomatic history and the balance of power from 1648 to 1815. Attention is given to the social and philosophical developments of the period.

428. 19th Century Europe (3) F

Prerequisite: History 110B. History of Europe from 1815 to 1914. This course covers the Industrial Revolution, the rise of middle-class democracy and economic liberalism, and the forces of imperialism which led to World War I.

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429. Europe Since 1914 (3) F

Prerequisite: History 110B. Survey of events from the beginning of World War I to the present. Special emphasis given to the economic, political, social, diplomatic, and intellectual trends of 20th century Europe.

432. Germany Since 1648 (3) S

Prerequisite: History 110A-B. The evolution of Germany from the Peace of Westphalia to the present. Emphasis is placed on political, social, economic, diplomatic and cultural trends in the 19th and 20th centuries.

434A. Russia to the 1917 Revolution (3) F (Formerly 434B)

Prerequisite: History 110B. An analysis of historical developments from the establishment of the Russian state at Kiev to the 1917 Revolution. Emphasis is placed upon the 18th and 19th centuries, the expansion of the empire, and the unique social and political currents which preceded the Soviet seizure of power.

434B. Russia Since 1917 (3) S (Formerly 434C)

An historical analysis of the Bolshevik Revolution and subsequent consolidation of power under the Communist regime. Chief emphasis is placed upon Soviet foreign policy and fundamental social, political, and cultural institutions and policies based upon Marxist-Leninist-Stalinist ideology.

461. Far East Since 1850 (3) S

Prerequisite: History 110A. An historical analysis of the Western impact on Eastern Asia in the 19th and 20th centuries with special emphasis on politics and diplomacy, the breakdown of the traditional societies, and the rise of communism in the 20th century.

466A. Middle East to the Crusades (3) F

The study of the events transpiring in the Middle East from the Roman world to the period of the Crusades. This will include the impact of the Muslim civilization upon the Middle East society.

466B. Middle East Since the Crusades (3) S

The development of the countries of the Middle East following the Crusades to the present. Special attention will be given the last two centuries.

471. American Colonial Civilization (3) F

Prerequisite: History 170A or consent of the instructor. The settlement of North America and the growth of Anglo-American civilization to 1763, stressing the development of political and economic institutions and a distinctive American culture.

472. United States from Colony to Nation (3) S

Prerequisite: History 170A or consent of instructor. Establishment of an independent government, and growth of a national economy and culture from 1763 to 1815.

473. Sectionalism and Civil War (3) F

Prerequisite: History 170A or consent of instructor. Slavery, sectionalism, and Civil War, and the impact of these forces upon national life and thought from 1815 to 1865.

474. The Growth of Modern United States (3) F

Prerequisite: History 170B or consent of instructor. The growth of the national economy, political repercussions and reform movements, the rise to a world power, and cultural developments from the Civil War to 1900.

475. United States from 1900 to 1932 (3) S

Prerequisite: History 170B or equivalent. A study of the political, economic, social, diplomatic, and intellectual trends and problems from 1900 to the election of 1932. Course will stress the reconsideration of traditional national policies toward the government, economy, and role of the United States in world affairs.

476. United States Since 1933 (3) F

Prerequisite: History 170B or equivalent. A study of United States history from the New Deal to the present. Includes political, social, economic, diplomatic, and intellectual developments and issues. Stresses the emergence of the national government as a factor in American life and the expansion of U.S. activity in foreign affairs.

485A. American Foreign Policy to 1900 (3) F

An analysis of American foreign relations from the American Revolution to 1900.

485B. American Foreign Policy from 1900 (3) S

An analysis of the rise of the United States as a world power in the twentieth century.

499. Independent Study (1-3) F, S

Open to advanced students in history with the consent of the department chairman. May be repeated for credit.

501. Seminar in the Content and Method of History (3) F

Prerequisite: Consent of the instructor.

505. Seminar in Analysis of Recent Interpretations in History (3) S

Prerequisite: Consent of the instructor.

520. Seminar in European History (3) S

Prerequisite: Consent of the instructor.

570. Seminar in American History (3) F

Prerequisite: Consent of the instructor.

590. History and Historians (3) F (Formerly 490)

Prerequisite: Consent of instructor. A study of the writings, personalities, and philosophies of representative historians from Herodotus to the present.

591. Thesis (3-6) S

Prerequisite: Consent of instructor.

JOURNALISM

IN THE DIVISION OF HUMANITIES

101. Reporting and Writing (3) F

Introduction to news reporting and writing, with emphasis on news gathering, evaluation, and the principles of clarity and conciseness.

Orange State College

102. Reporting and Writing (3) S

Prerequisite: Journalism 101 or permission of instructor. Concentration on writing of more advanced news stories and news features.

218A, B. Press Photography (2) F, S

A lecture and laboratory course in photographic theory and the application of photographic principles.

318A, B. Press Photography (2) F, S

A lecture and laboratory course in photographic theory and the application of photographic principles.

331. News Communication (3) F

An introduction to the news communication media, with experience in news writing. (Recommended for credential candidates.)

332. Copy Editing and Makeup (3) S

Practice and theory of editing of materials for various types of publications, including selection of materials, copyreading, headline writing, proofreading, and makeup.

333. Mass Communication in Modern Society (3) S

The basic structure and the interrelationships of newspapers, magazines, films, radio, television, in terms of their significance as social instruments and economic entities in modern society.

334. Feature Article Writing (3) S

Non-fiction writing for newspapers and magazines, including study of sources, methods, and markets. Open to non-majors.

335. Reporting of Public Affairs (3) S

Coverage in depth of significant events pertinent to operations of governmental units and related organizations.

338A, B, C. Newspaper Production (3) F, S

Prerequisite: Permission of the instructor. A lecture and activity course in which members of the class constitute the editorial staff of the student newspaper. The group meets four hours per week for critiques in news reporting, writing, editing and makeup, followed by production.

353. Advertising Copy and Layout (3) F

Writing of copy and layout of advertisements, based on study of sales appeals, attention factors, and illustrations.

358A, B. Publications Production (2) F, S

A workshop for students engaged in the production of annual, quarterly, monthly, and other types of student publications, as scheduled by appropriate college authorities. Activities will include writing, editing, photography, art work, and layout.

361. Theory and Practice of Public Relations (3) F

Examination of basic principles of public relations and their application in non-commercial as well as commercial fields, including industry, education, government and welfare.

371. Radio-Television News and Public Affairs (3) S

Theory and practice of covering news events and public affairs for radio and television. Student material will be prepared for broadcast locally.

380. Introduction to Radio and Television (3) F

The history and development of the broadcasting industry and its impact and influence on our society. A study of the basic broadcast practices, audiences, production, and programming. (Same as Drama 380.)

401. Report Writing (3) F

Planning, organizing and writing of various kinds of reports for business, education and government. Consideration will be given to use of graphic aids and preparation of copy for reports that are to be printed.

425. History and Philosophy of American Mass Communication (3) F

The development of American mass communication beginning with newspapers and periodicals and continuing through radio and television. Includes ideological, political, social and economic aspects.

426. World Press and Propaganda Analysis (3) F

Examination of major news communication systems, both democratic and totalitarian, and the means by which news and propaganda are conveyed internationally.

427. Seminar on Current Issues in Mass Communication (3) S

Prerequisite: Consent of instructor. Consideration of problems such as the extent to which the mass media should be regulated by the government, "objective" versus "interpretive" news reporting, and ethical and legal questions of particular cases.

439. Mass Media Internship (2) F, S

According to his vocational preference, the student serves a supervised internship with a newspaper, magazine, radio or television station, press association, advertising agency, or public relations firm.

448A, B. Special Projects in Mass Communication (2) S

Prerequisite: Consent of the department chairman. Individually supervised mass media activities, on and off campus. Projects may involve newspapers, magazines, radio, television, and public relations agencies.

JOURNALISM EDUCATION

IN THE DIVISION OF HUMANITIES

(Offered by the Department of Journalism)

442. Teaching Journalism in the Secondary School (2-3) S

Theory and technique of advising school newspaper and yearbook staffs. Relation of classroom instruction to staff assignments. Designed for credential candidates in English and Language Arts who may supervise school publications.

MANAGEMENT

IN THE DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

341. Principles of Management (3) F, S

Prerequisite: Economics 200 or 200 A,B. The fundamentals of management universal to all organizations; covers such studies as planning, organizing, activating, and controlling.

Orange State College

342. Production Management (3) F, S

Prerequisite: Management 341. The study of modern manufacturing and its methods of operation. Major emphasis is placed upon the efficient use of management, labor, and productive equipment.

343. Personnel Management and Human Relations (3) F

Prerequisite: Management 341, or consent of the instructor. An inquiry into the problems of personnel relating to the firm, community, and economy; the importance of good human relations; and management's responsibilities in the efficient direction of personnel.

346. Business Law (3) F, S

The philosophy, institutions and role of the law as it applies to business operations. A course designed to provide the student with an understanding of the scope and extent of basic subjects in the area of business law as well as a knowledge of the operation, function, and structure of courts and administrative agencies. Analysis of the areas of contracts, agency, sales, and personal property with emphasis upon the principles involved and the conditions requiring professional legal advice.

347. Business Law (3) S

Prerequisite: Management 346. The philosophy, institutions and role of the law as it applies to business operations. Analysis of the areas of bailments, sales, negotiable instruments, patents, employment relations, and business organizations. Law in its relationship to business with special emphasis on current problems.

441. Labor-Management Relations (3) F

Prerequisite: Management 341 or consent of the instructor. The course provides an understanding of the impact of labor-management relations upon labor, management, and the public. Proper grievance procedure, collective bargaining, and the settlement of disputes are among the subjects that are examined.

442. Labor Law (3) S

Prerequisites: Management 341, and consent of the instructor. The history of labor law, the investigation of federal and state legislation, and its effects upon American society.

444. Motion and Time Study (3) S

Prerequisites: Management 341, 342. The fundamentals of motion and time study as applied to modern work simplification, the reduction of waste and inefficiency, and the responsible consideration of the employee.

445. Production Control Analysis (3) F

Prerequisite: Management 342. Introductory calculus, statistics, and a course in economic principles or consent of the instructor. The quantitative analysis of production and quality management related to such areas as mathematical programming, statistical analysis, and economic analysis.

446. Managerial Economics (3) F, S

Prerequisite: Economics 200, or 300, and consent of the instructor. The application of economic analysis to the solution of business problems; the character of the firm's demand, costs, prices, and profits; short and long-run planning for a business enterprise; and the relationship between the firm and the economy.

447. Management Decision Simulation (3) F

Prerequisite: The Business Administration core or consent of the instructor. A simulation of an oligopolistic industry to provide the student with an opportunity to use analytical tools to make managerial decisions in the functional areas of management.

449. Business Policies (3) F, S

Prerequisites: Accounting 101A, B, or 200, Finance 330, Management 341, and Marketing 351, and senior standing. The course is generally limited to seniors and graduate students. An integrative course examining various problems in the several fields of management. Through analysis of cases and problems the student is encouraged to recognize the usefulness of other disciplines than business, as well as the role of individual and team action in the decision-making process.

499. Independent Study (3) F, S (Formerly 498)

Prerequisites: Management concentration, senior standing, and approval by the department chairman. Open to qualified undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit.

543. Seminar in Personnel Administration (3) F

Prerequisites: Graduate standing and the consent of the instructor. The seminar provides the graduate student with an opportunity to study cases, problems, and significant literature in the field in order to develop a comprehensive understanding of personnel administration and human relations.

544. Organizational Behavior, Theory, and Administration (3) S

Prerequisites: Graduate standing, Management 341, and consent of the instructor. The analysis of human behavior in organization, studies in organizational theories, and administrative action.

MARKETING

IN THE DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

(Offered by the Department of Marketing and Quantitative Methods)

307. Distribution Costs (3) S

Prerequisites: Accounting 101B, or 200, and Marketing 351. The development of quantitative measures for marketing activity; costs of distributing through different channels of distribution, advertising versus personal selling, and movement activities; development of sales budgets, standard costs, and the analysis of actual performance in the light of budgets and standards. (Same as Accounting 307)

351. Principles of Marketing (3) F, S

Prerequisite: Economics 200. Marketing organization and methods for the individual business with serious consideration of the social and economic aspects of the distribution task. Topics include the consumer, his place and his problems in the marketing area; marketing functions, institutions, and policies; legal and political environment for marketing activity; and an evaluation of the present marketing system.

352. Principles of Retailing (3) F

Prerequisite: Marketing 351. Retail problems of location; organization; buying; selling media and methods; pricing; and merchandising. Emphasis will be placed upon operating procedures and control, planning, budgeting, and costs.

Orange State College

353. Marketing Administration (3) F, S

Prerequisite: Marketing 351. Survey of the major problems facing the marketing executive, including product planning, pricing, market and analysis, sales potentials, marketing organization, and administration of the sales force.

354. Principles of Advertising (3) S

Prerequisite: Marketing 351. The management of the advertising function, including the role of advertising in marketing strategy, budgetary considerations, allocation among media, measurement of effectiveness, administration and control, and its economic and social implications. Case method of instruction is emphasized.

355. Credit and Credit Administration (3) F

Prerequisite: Marketing 351. The general nature and functions of credit, credit instruments; the operation of the credit department; sources of credit information; acceptance of credit risk; establishment of credit limits; and the problem of collections.

356. Creative Motivation in Marketing (3) S

Prerequisite: Marketing 351. Personal salesmanship and the application of the findings of the behavioral sciences to selling and group dynamics as they relate to the creative and promotional aspects of the business.

421. International Trade (3) F

Prerequisite: Economics 200. An examination of the theory of international trade and the means and significance of balance of payments adjustments, with an analysis of past and present developments in international commercial and monetary policy. (Same as Economics 421)

452. Marketing Research (3) S

Prerequisites: Marketing 351, and Quant. Meth. 361. The application of scientific methodology as an aid in solving problems of product planning, pricing, promotion, and distribution. Practical application is emphasized through class projects and case problems.

459. Marketing Problems (3) F, S

Prerequisite: Marketing 351. It is recommended that the student have completed at least two advanced marketing courses or have equivalent business experience. Case studies of problems facing the marketing executive; identification and analysis of the problems; selection and evaluation of alternative solutions; and implementation of recommended solutions.

499. Independent Study (3) F, S (Formerly 498)

Prerequisites: Marketing concentration, senior standing, and approval by the department chairman. Open to qualified undergraduate students desiring to pursue directed independent inquiry. May be repeated for credit.

552. Seminar in Product Planning and Price Policy (3) F

Prerequisite: Marketing 351. The product planning problem and its implications for the marketing area and other areas of the business. An examination of pricing problems and objectives and policies for solution and implementation.

553. Marketing to the Government (3) S

Prerequisite: Marketing 351. The marketing of defense and non-defense products to the government. The nature and administration of contractual agreements with government agencies.

MATHEMATICS

IN THE DIVISION OF SCIENCE AND MATHEMATICS

100A, B. Axiomatic Arithmetic (3-3) F, S

Prerequisites: One year of algebra and one year of geometry. The logical structure of arithmetic from an axiomatic viewpoint. Emphasis will be on the contrast between models of the number system and numbers as mathematical objects. Axioms and theorems in calculation with applications.

120. Finite Mathematics (3) F, S

Prerequisites: Three years of high school mathematics or its equivalent. This is a course comprising introductions to the following topics: logic, set theory, matrices, and probability. It is particularly suited to students of economics, the biological and social sciences.

150A, B. Analytic Geometry and Calculus (4-4) F, S

Prerequisites: 4 years of high school mathematics inclusive of trigonometry and a passing score in the placement test. An introduction to analysis including analytic geometry, functions, continuity, differentiation, the definite integral, integration, applications.

250A, B. Intermediate Calculus (3-3) F, S

Prerequisites: Math 150A-B or equivalent. A continuation of Math. 150. Topics include Taylor's theorem, infinite series, functions of several variables, partial differentiation, multiple integrals, linear differential equations.

291. Linear Algebra (3) F, S

Prerequisite: Math. 150B. The study of matrices, determinants, vector spaces, linear transformations.

300. Fundamental Concepts of Mathematics—Algebra (3) F

Prerequisite: Math 150B. Selected topics in modern algebra. Designed especially for teachers and prospective teachers of secondary mathematics.

301. Fundamental Concepts of Mathematics—Geometry (3) S

Prerequisite: Math 150B. Selected topics in elementary geometry. The study of various axiom systems for Euclidean geometry; non-Euclidean geometry; projective, metric, and affine geometry. Designed especially for teachers and prospective teachers of secondary mathematics.

302. Modern Algebra (3) S

Prerequisite: Math 291. The integers, rational numbers, real and complex numbers, polynomial domains, introduction to groups, rings, integral domains and fields.

304. Mathematical Logic (3) F, S (Formerly Math. 292)

Prerequisite: Math 250A. An introductory course in the elements of mathematical logic.

305. Elements of Set Theory (3) F

Prerequisite: Math 250B. Operations on sets; functions; cardinals and ordinals; ordering, well ordering; axiom of choice; transfinite numbers.

310. Differential Equations (3) F, S

Prerequisite: Math 250B and Math 291. An introduction to existence theorems and the theory of differential equations.

Orange State College

314. Elementary Topology (3) S (Formerly 413)

Prerequisite: Math 250B. An introductory course in point set and algebraic topology.

320. Projective Geometry (3) F, S

Prerequisite: Math 291. Homogeneous coordinates, projective group, cross-ratio, duality, point and line conics.

330. Number Theory (3) S

Prerequisite: Math 250B. Divisibility, congruences, prime number theory, Diophantine problems.

335A, B. Probability and Mathematical Statistics (3-3) F, S

Prerequisite: Math 250B. An introductory course in probability theory and its applications, based on use of the calculus.

350A, B. Advanced Calculus (3-3) F, S

Prerequisite: Math 250B, Math 291. Designed to introduce the student to rigorous proofs in analysis. Topics include the real number system, continuity, differentiation and integration of functions of several variables, infinite integrals and series.

406A. Applied Mathematics (Multilinear Analysis) (3) F

Prerequisites: Math 350A. Linear algebra, tensor products and Grassman products, geometric interpretation. Multilinear algebra, convergence, Hilbert space, Daniell integral, distributions, spectral theory of linear operators.

406B. Applied Mathematics (Functional Equations) (3) S

Prerequisites: Math 406A. Applications of multilinear analysis, integral transformations, approximation theory, difference equations, ordinary and partial differential equations, harmonic analysis, integral equations.

407A, B. Abstract Algebra (3-3) F, S

Prerequisite: Math 291. Sets, mappings, groups, rings, modules, fields, homomorphisms, advanced topics in vector spaces and theory of linear transformations, matrices, algebras, ideals, field theory, Galois theory.

412A, B. Complex Analysis (3-3) F, S

Prerequisite: Math 350A. An introduction to the study of functions of a complex variable.

425. Differential Geometry (3) S (Formerly 325)

Prerequisite: Math 350A. Topics in classical differential geometry will be covered using modern methods. The course will include an introduction to transformation groups, Lie group germs and their Lie algebras, exterior and tensor calculus, and Riemannian geometry.

450A, B. Real Analysis (3-3) F, S

Prerequisite: Math 350A. An introductory course in modern functional analysis. Measure theory, differentiations and theories of integration. Hilbert and Banach spaces, linear transformations and spectral theories.

MATHEMATICS EDUCATION

IN THE DIVISION OF SCIENCE AND MATHEMATICS

(Offered by the Department of Science and Mathematics Education)

432. Teaching Mathematics in the Elementary School (2) F, S

Prerequisite: Math. 100B. Objectives, content, materials, pupil experiences, methods of instruction, and evaluation in arithmetic. The nature and scope of arithmetic in the elementary school. (2 hours lecture per week.)

442. Teaching Mathematics in the Secondary School (2-3) S

Objectives, methods, and materials for teaching mathematics in secondary schools. Required, before student teaching, of students presenting majors in mathematics for the General Secondary Credential. Students without teaching experience must register for three units credit, and must allow sufficient time in their schedules, at the same hour each day, so that they can serve as teacher aides in high schools. See Education listing for professional prerequisites. (2 hours lecture per week.)

MUSIC

IN THE DIVISION OF FINE AND APPLIED ARTS

100. Introduction to Music (3) F, S

A basic approach to listening to music with understanding and pleasure through a general survey of musical literature representative of various styles and performance media. Music will be related to other arts through lectures, recordings, and concerts. Closed to music majors.

101. Music Theory for Non-Music Majors (3) F, S

Basic theory and practical applications to further understanding of basic music principles and to improve music performance and listening skills. Includes sight-singing and relationship to keyboard and simple melodic instruments. Not open to music majors.

111A, B. Music Theory (3-3) F, S

Three hours lecture, one hour laboratory. A year course covering diatonic harmony and musicianship. Includes scales and intervals, triads and their inversions, harmonizations, non-harmonic tones, modulation and dominant seventh chords. Practical applications, to include sight-singing, dictation and keyboard harmonizations.

151A, B. Survey of Musical Literature (2-2) F, S

Open to music majors and minors and qualified students by consent of instructor. Two hours lecture, one hour listening. An introductory course for majors in the study of the history and literature of music in Western civilization. Students must be able to read music as a part of the analysis of form, design and style.

161a, 361a. Symphony Orchestra (1) F, S (1,1,1,1) (1,1,1,1)

Open by audition to college students and qualified adults in the community. Performance of standard representative symphonic works.

161b, 361b. College Choir (1) F, S (1,1,1,1) (1,1,1,1)

Open to all college students. Study and performance of standard representative choral literature works.

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161c, 361c. Symphonic Band (1) F, S (1,1,1,1) (1,1,1,1)

Open by audition to college students and qualified adults in the community. Performance of standard representative symphonic band literature.

162b, 362b. Wind Ensemble (1) F, S (1,1,1,1) (1,1,1,1)

Open to qualified wind students by audition or consent of the instructor. Performs representative wind ensemble literature.

162c, 362c. Vocal Ensemble (1) F, S (Formerly 312C)

Study and performance of choral literature of the Renaissance and Baroque periods. Open only to students by audition. Public performance required.

163, 363. Chamber Music Ensembles (1) F, S (Formerly 312D)

Open to all qualified wind, string, or keyboard students. Various ensembles will be formed to study, read, and to perform representative chamber literature of all periods.

170, 370. Class Instruction, Principal Instrument or Voice (1) F, S (1,1,1,1) (1,1,1,1)

Class instruction in the principal instrument or voice for intermediate and advanced students. Open only to students whose placement-proficiency examination reveals deficiencies in the major performing field. (See 371-8)

171-178, 371-378. Studio (Private) Instruction, Principal Instrument or Voice (1) F, S (1,1,1,1) (1,1,1,1)

Individual on-campus lessons with approved instructors. One unit per semester required of all music majors in the principal performing field. Special Fee.

171, 371. Voice, Intermediate and Advanced

172a, 372a. Violin, Intermediate and Advanced

172b, 372b. Viola, Intermediate and Advanced

172c, 372c. Cello, Intermediate and Advanced

172d, 372d. String Bass, Intermediate and Advanced

173a, 373a. Oboe, Intermediate and Advanced

173b, 373b. Flute, Intermediate and Advanced

173c, 373c. Clarinet, Intermediate and Advanced

173d, 373d. Bassoon, Intermediate and Advanced

174a, 374a. Trumpet, Intermediate and Advanced

174b, 374b. Trombone and Baritone, Intermediate and Advanced

174c, 374c. French Horn, Intermediate and Advanced

174d, 374d. Tuba, Intermediate and Advanced

175, 375. Percussion, Intermediate and Advanced

176a, 376a. Piano, Intermediate and Advanced

176b, 376b. Organ, Intermediate and Advanced

377. Composition, Advanced (Formerly 471I)

378. Conducting, Advanced (Formerly 471M, N)

*** 181, 381. Orchestral Instruments (1,1,1,1 or 2,2,2,2) (1,1,1,1 or 2,2,2,2)**

Required of all degree candidates and for specialization in teaching.

* Instrumental majors are required to take a minimum of 8 units of orchestral instruments, Mu 181-381.

181a, 381a. String Instruments (1-2) F

Specialization on violin, with related work on standard instruments of the string family.

181b, 381b. Woodwind Instruments (1-2) F

Specialization on clarinet, with related work on standard instruments of the woodwind family.

181c, 381c. Brass Instruments (1-2) S

Specialization on trumpet, with related work on standard instruments of the brass family.

181d, 381d. Percussion Instruments (1-2) S

Specialization on snare drum, with related work on standard instruments of the percussion family.

182A,B 382A,B. Piano Class for Music Majors (1) F, S

Prerequisite: declaration of the music major and consent of instructor. Designed to meet music major piano requirements for degree and teaching credentials. Fundamentals of keyboard technique for students whose major performance field is not piano. Not required for piano majors.

183A,B, 383A,B. Voice Class for Music Majors (1) F, S

Prerequisite: declaration of the music major and consent of instructor. Designed to meet voice requirement for instrumental and piano majors and to prepare candidates for proficiency requirement for teaching credential. Not required for voice majors.

211A,B. Music Theory (3-3) F, S

Prerequisite: Mu 111B, or equivalent. Three hours lecture, one hour laboratory. A year course covering secondary dominants, diminished seventh, ninth, eleventh and thirteenth chords, sequence and chromatic chords. Practical applications to include sight-singing, melodic and harmonic dictation, and keyboard harmonizations.

220. Structures of Music (2) S

A non-technical study of the aesthetics of musical form and their relation to similar aspects in the other arts.

310. Theory Review (3) F

Review of materials covered in Mu 111A,B and Mu 211A,B. For regular or transfer students whose junior placement-proficiency examination indicates need for further study prior to taking upper division theory. Includes sequence, secondary dominants, modulations and chromatic harmony and sight-singing and dictation based upon the materials of Mu 211A,B.

312A,B. Counterpoint (2-2) F, S

Prerequisites: Music 111A,B and 211A,B. Basic 18th Century counterpoint in two, three and four parts, double counterpoint, canon, and fugue forms.

321A,B. Form and Analysis (2-2) F, S

Prerequisite: Consent of instructor. Analysis of structural elements of music such as motive, phrase, and period; binary, ternary, rondo, sonato-allegro and larger musical forms in representative musical works.

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322A,B. Composition (2-2) F, S

A. Prerequisites: elementary counterpoint, Music 211B or consent of instructor. Ear training, analysis of smaller forms, simple composition of two-three part song form styles. B. Analysis and writing of more complex musical forms.

323A. Orchestration (2) S

Prerequisite: Music 211B and consent of instructor. Writing and analysis of orchestral music.

333. Music and Child Development (3) F, S (Replaces MU 432)

Study of the relationship of music to child growth and development, with emphasis on the child from five to twelve.

350. Music in Our Society (3) F, S

Prerequisite: Mu 100 or consent of instructor. Three hours lecture and discussion, one hour listening. Designed to increase interest and an understanding of music in its relation to our general culture. Emphasis on structure, analysis and aesthetic principles through the study of masterpieces of musical literature of various historical periods.

351A,B. History and Literature of Music (3-3) F, S

Prerequisite: Music 351A, History and Literature of Music. A. A study of the history and literature of music from early Greek beginnings through the Renaissance. B. A study of the history and literature of music covering the Baroque, Classic, Romantic period and the 20th Century. (Required of all music majors.)

384A,B. Piano Class for Teachers (1-1) F, S

Prerequisite: permission of instructor. Elementary and intermediate instruction in basic piano techniques, with special emphasis on application to appropriate song materials and simple accompaniments used in the elementary school. Required of candidates for general elementary credential who specialize in music and those preparing to teach in kindergarten and first grades.

391A,B. Choral Conducting (2-2) F, S

Principles, techniques, and methods of conducting choral groups. Laboratory work with class and vocal ensembles, using standard choral repertoire. Required of all music education majors.

392A,B. Instrumental Conducting (2-2) F, S

Principles, techniques, and methods of conducting orchestral and band groups. Laboratory experience in conducting instrumental groups, using standard instrumental literature.

451. Music of the Baroque Period (2) F

Prerequisite: Mu 351A,B or consent of instructor. Two hours lecture and discussion, one hour weekly listening. Detailed analysis and comparison of selected instrumental, vocal and keyboard musical compositions of the Baroque period.

452. Music of the Classic and Romantic Period (2) S

Prerequisite: Mu 351A,B or consent of instructor. Two hours weekly lecture and discussion. One hour per week listening. The development of music in the classic and romantic periods including the beginnings of opera, instrumental and symphonic developments from Haydn to Berlioz, keyboard and vocal music.

453. Twentieth Century Music (2) S (Formerly 444)

Prerequisite: Mu 351A,B or consent of instructor. Developments in the music of Western Europe and the Western Hemisphere since 1890. Intensive study of contemporary music and its structure.

458. Collegium Musicum (2) S (Formerly 448)

The study and performance of rare and old music, both instrumental and vocal. Techniques of musical research will be applied. Students should be competent performers.

498. Senior Recital F, S (Formerly 499)

Presentation of a public recital in principal area of performance concentration.

591. Advanced Choral Conducting and Interpretation (2) F

Prerequisite: Mu 391B, conducting experience, or consent of instructor. Advanced problems in choral conducting techniques, with emphasis on laboratory work with student groups and in concert conducting.

592. Advanced Instrumental Conducting and Interpretation (2) S

Prerequisite: Mu 392B, conducting experience, or consent of instructor. Advanced study of baton technique with emphasis on interpretive and stylistic problems in the conducting of major works. Students will be expected to prepare works for public performance.

MUSIC EDUCATION

IN THE DIVISION OF FINE AND APPLIED ARTS

(Offered by the Department of Music)

430. Special Projects in Music Education (1-3) F, S

Advanced projects relating to particular areas of teaching specialization for teachers and supervisors of music. Instructor's permission required.

435. Children's Literature in Music (2) F, S

Prerequisite: Mu 333 or consent of instructor. A survey of books and listening materials for pre-school and elementary age children, with techniques of presentation. Designed for the classroom teacher or general student.

441. Teaching Music Theory and Appreciation in the Public Schools (2-3*) F

Prerequisite: 20 units in music, Education 311, or consent of instructor. Required of all music majors working for the Standard Teaching Credential, Secondary Specialization. The history and organization of the teaching of music theory and appreciation in the public schools. Interrelation of general and specialized classes and their place in the total school program. Music literature, materials, and techniques for producing effective musical growth.

442. Teaching Vocal Music in the Public Schools (2-3*) S (Replaces 442b)

Prerequisite: 20 units in music, Education 311, senior class standing or consent of instructor. Required of all music majors working for the Standard Teaching Credential, Secondary Specialization. The history and organization of the teaching of vocal and choral music in public education. Planning sequential vocal training and performance organizations for the total school program. Study of choral literature and techniques of instruction.

443. Teaching Instrumental Music in the Public Schools (2-3*) S
(Replaces MU 442a)

Prerequisite: 20 units in music, Education 311, senior standing or consent of instructor. Required of all music majors working for the Standard Teaching Credential, Secondary Specialization. The history and organization of the teaching of instrumental music in public education. Study of music literature and appropriate curricula for the development of concert bands, symphony orchestras, and chamber music ensembles for the total school program.

545. Supervision and Administration of Music in the Public Schools (2) S

Open to music education majors with teaching experience. Philosophy, principles and practices of supervision of music in the public elementary and secondary schools. Emphasis on modern principles of leadership, types of services, organization, management and evaluation of programs of instruction. Required of candidates for supervisory credential.

PHILOSOPHY
IN THE DIVISION OF HUMANITIES

110. Comparative Study of the World's Great Religions (3) S (Formerly 301)

A study of man's religious impulse as viewed from the philosophical standpoint. An attempt will be made to analyze and to compare religious experience as expressed in Christianity, Islam, Buddhism, Hinduism, etc.

210. Logic (3) F, S (Formerly 201)

Analysis of the various forms given to propositions and the basic requirements necessary for valid inference.

211. The Older Schools of Philosophy (3) F

A study of the viewpoints which constitute such world views as Materialism, Platonism, Stoicism, Mysticism, and Scholasticism.

212. The Modern Schools of Philosophy (3) S

A study of the viewpoints which constitute the world views of Rationalism, Empiricism, Idealism, Pragmatism.

250. Philosophy of Ideas (3) F, S

Analysis of basic ideas which have shaped modern thought.

310. Ethics (3) F, S (Formerly 101)

An analysis of the problems of human conduct: motivation, valuing, norms, social demands, and personal commitments.

311. Philosophy of Aesthetics (3) F, S (Formerly 401)

An investigation into the conditions and the aims of aesthetic experience.

331. History of Philosophy: Problems of Being and Becoming (3) F

Analysis and survey of two fundamental problems of philosophy: Being and Becoming. The contributions of the great philosophers to these problems will be considered.

* Students without teaching experience must register for three units credit in one of the following: MU 441, 442, or 443, and must allow sufficient time in their schedules at the same hour each day so that they can serve as teacher aides in public schools.

332. History of Philosophy: Problems of Knowledge and Valuing (3) S

Analysis and survey of the problems of Knowledge and Valuing. The contributions of the great philosophers to these problems will be considered.

340. Logic and Epistemology (3) F

An investigation into the connections that obtain between valid principles of reasoning and various systems of knowledge and belief.

347. Selected Problems in Philosophy (3) F (Formerly 402)

An investigation into the significant contributions made to human culture through philosophic analysis.

407. Seminar in Basic Concepts of Philosophy and Psychology (4) F, S

Prerequisites: 3 units in both philosophy and psychology. An interdisciplinary study of significant interrelationships which obtain between basic concepts common to both philosophy and psychology.

**417A. Seminar in Aristotle's Scientific and Speculative Views (3) F
(Offered in alternate years)**

An intensive study of the great philosopher's views concerning the nature and function of science, logical reasoning, and the status of universals.

**417B. Seminar in Aristotle's Social and Aesthetic Views (3) S
(Offered in alternate years)**

A study of the problems of human conduct, government and art.

427A. Seminar in Spinoza's Ethics and Metaphysics (3) F

A detailed and critical study of Spinoza's views concerning the nature of man and the problems of conduct as developed in the *Ethics*.

427B. Seminar in Spinoza's Political Theory (3) S

A detailed and critical study of the *Tractatus Politicus* and the *Tractatus Theologico-Politicus*.

**447A. Seminar in the Development of Plato's Philosophy (3) F
(Offered in alternate years)**

A critical and detailed study of the early and middle *Dialogues*, terminating with *The Republic*.

447B. Seminar in Plato's Later Dialogues (3) S (Offered in alternate years)

A critical and detailed study of the later *Dialogues* which follow *The Republic*, terminating with *The Laws*.

450. Philosophy of Science (3) S

An investigation into the methodologies of the deductive and inductive sciences.

451. Contemporary Interpretations of Man (3) F, S (Formerly 411)

An interdisciplinary course stressing the dominant twentieth century philosophical interpretations of man and the imaginative expression of those views in major literary works. (Also English 451)

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460. Philosophy of History (3) S

A study of the metaphysical and the logical problems of History.

467A. Kant's Theory of Knowledge (3) F

A critical and detailed study of *The Critique of Pure Reason*.

467B. Kant's Theory of Ethics and Aesthetics (3) S

A critical and detailed study of *The Critique of Practical Reason* and *The Critique of Judgment*.

499. Independent Study (1-3) F, S (Formerly 480)

Prerequisites: Minimum of 12 units in Philosophy and approval of the Department. Such study is designed to develop greater competency in research. May be repeated for credit.

PHYSICAL EDUCATION

IN THE DIVISION OF EDUCATION

(Offered by the Department of Health Education,
Physical Education, and Recreation)

Required Activity Courses

All students must successfully complete four semesters of physical education activity courses as partial fulfillment of the General Education requirements for the baccalaureate degree. Each course carries $\frac{1}{2}$ unit credit. The Department of Physical Education recommends that the student begin this program with the first semester of attendance (summer session courses in physical education do not fulfill this requirement). Other than exceptional cases, students will be expected to complete this requirement prior to the last thirty units of their baccalaureate degree program. Not more than six units of credit in physical education activities, including intercollegiate athletics courses, may be applied toward credit for graduation. Credit in intercollegiate athletics courses may meet not more than two semesters of the college General Education requirement in physical education. Physical education activities courses may not be repeated for credit.

Physical education activities courses are designed to offer the student opportunities to develop optimal skills, knowledge, and confidence for mental, social, and physical fitness objectives for educational, recreational, and utilitarian purposes in our democratic society. The program is organized and conducted on a planned basis in four instructional areas: (1) Aquatic Activities, (2) Group and Team Activities, (3) Individual Activities, and (4) Dance Activities.

• FOR MEN

AQUATIC ACTIVITIES: (PE 110 Series)	GROUP AND TEAM ACTIVITIES: (PE 120 Series)	INDIVIDUAL ACTIVITIES: (PE 130 Series)	DANCE ACTIVITIES: (PE 140 Series)
111 m Swimming F, S	121 m Group Games F 122 m Group Games S	131 m Gymnastics, Tumbling, and Rebound Tumbling F, S 132 m Combatives F, S 133 m Physical Condi- tioning F, S 134 m Adapted Physical Education F, S 135 m Track and Field F, S	

• FOR WOMEN

111 w Swimming F, S	121 w Group Games F 122 w Group Games S	131 w Gymnastics, Tumbling, and Rebound Tumbling F, S 133 w Physical Condi- tioning F, S 134 w Adapted Physical Education F, S	
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• CO-EDUCATIONAL

113 Life-Saving and Water Safety F, S	123 Group Games (Open only to prospective elementary school teachers.) F, S	136 Archery F, S 137 Golf F, S 138 Tennis F, S	141 Social Dance F, S 142 Folk and Square Dance F, S 143 Modern Dance S
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COURSES IN INTERCOLLEGIATE ATHLETICS

Consent of the coach of the sport is required for enrollment. Each semester of enrollment carries 1 unit of credit. Credit in intercollegiate athletics courses may meet not more than two semesters of the college general education requirement in physical education. Not more than six units of credit in physical education activities, including intercollegiate athletics courses, may be applied toward credit for graduation.

PE 317. Baseball (1) S

PE 318. Basketball (1) F, S

PE 319. Cross-Country (1) F

PE 321. Golf (1) S

PE 324. Tennis (1) S

PE 325. Track and Field (1) S

PROFESSIONAL COURSES**PE 432. Teaching Physical Education in the Elementary School (2) F, S**

Prerequisite: Educ. 311. Physical education rationale, techniques, and materials for elementary school teachers. Methods of teaching games, sports, rhythms and dances commonly taught in elementary schools. Observations and laboratory practice included. (4 hours activity per week.)

PE 442. Teaching Physical Education in the Secondary School (2-3) F

Prerequisites: 20 units in physical education, Educ. 311, Educ. 300, senior standing, or consent of the instructor. Objectives, methods, and materials for teaching physical education in secondary school. Required before student teaching, of students presenting majors in physical education for the Standard Teaching Credential. Students without teaching experience must register for three units credit, and must allow sufficient time in their schedules at the same hour each day, so that they can serve as teacher aides in high schools. (1 hour lecture, 2 hours activity.)

PHYSICAL SCIENCE**IN THE DIVISION OF SCIENCE AND MATHEMATICS**

(Offered by the Departments of Chemistry and Physics)

201. Modern Physical Science (4 or 5) F, S

Prerequisite: 1 year of high school Algebra or equivalent, or permission of the instructor. Taught jointly by the departments of chemistry and physics, this course presents the essential unifying features of the basic physical sciences, chemistry, and physics; the modern concepts of the physical and chemical theory of atomic and molecular structure form the unifying course material. Selected physical and chemical theory (from the fields of mechanics, electricity and magnetism, light, kinetic theory, thermodynamics, quantum theory, and inorganic and organic chemistry) are included to provide the necessary background material. (4 hours lecture, 1 hour recitation per week.)

PHYSICS ***IN THE DIVISION OF SCIENCE AND MATHEMATICS****201. Modern Physical Science (4 or 5) F, S (See course description under Physical Science 201)****221. Fundamental Physics (4) F, S**

Prerequisite: Math 150A; corequisite: Math. 150B. Fundamental classical physics including mechanics, heat and thermodynamics, acoustics, and wave motion. (4 hours lecture, 3 hours laboratory per week.)

222. Fundamental Physics (5) F, S

Prerequisite: Physics 221. Fundamental classical and modern physics, including physical optics, electricity and magnetism, and an introduction to modern physics. (5 hours lecture, 3 hours laboratory per week.)

223. Fundamental Physics (3) S

Prerequisite: Physics 222. Fundamental physical concepts are presented in a unifying framework, using the postulational approach. The five major theories:

* For all courses, prerequisites not requiring consent of the department chairman may be waived by the instructor of the course if he is satisfied that the student is qualified to undertake the course. A grade of C or better is required for all prerequisite courses.

classical mechanics, relativity, electricity, quantum mechanics, and statistical mechanics form the principal material for this course, which is designated for the student who has just completed the 9 unit sequence, Physics 221 and 222. (3 hours lecture per week.)

381. Advanced Physics Laboratory (2) F

Prerequisite: Physics 222. Corequisite: Physics 431. Selected experiments in electrical measurements and electronics, with emphasis on precision of measurement and standardization of instruments. (1 hour lecture, 6 hours laboratory per week.)

382. Advanced Physics Laboratory (2) S

Prerequisite: Physics 381. Corequisite: Physics 441. Selected experiments in mechanics, acoustics, physical optics, and atomic spectra. (1 hour lecture, 6 hours laboratory per week.)

411. Theory of Wave Motion (3) F

Prerequisites: Physics 222, Mathematics 150B. The properties of wave motion: production, propagation, refraction, diffraction, interference, and transmission through surfaces of waves, as applied to physical optics, acoustics, heat radiation, and wave mechanics. (3 hours lecture per week.)

416. Thermodynamics and Introduction to Kinetic Theory (3)

Prerequisites: Physics 222, Mathematics 250B. A postulational study of thermodynamics with emphasis on thermodynamic states rather than on thermodynamic processes. An introductory course in the basic concepts and postulates, conditions of equilibrium, formal relationships, processes and thermodynamic engines, stability of thermodynamic systems, first- and second-order phase transitions, the Nernst postulate, and representative applications. (3 hours lecture per week.)

431. Electricity and Magnetism (3) F

Prerequisites: Physics 222, Mathematics 250B. Theories of electrostatics, electrodynamics, and electromagnetic waves. Introduction to magnetohydrodynamics. (3 hours lecture per week.)

441. Analytical Mechanics (3) S

Prerequisites: Physics 222, Mathematics 250B. Principles of Newtonian mechanics applied to the statics and dynamics of particles and rigid bodies. Introduction to Lagrangian and Hamiltonian equations. (3 hours lecture per week.)

451. Modern Physics (3) S

Prerequisites: Physics 222, Mathematics 250B. Discussion of experiments and introduction to theory for selected topics in atomic, nuclear, and solid state physics. (3 hours lecture per week.)

452. Physics of Nuclear Radiation (3) (Offered in alternate years)

Prerequisite: 1 year college physics. X-rays, radioactivity, interaction of radiation with matter, detection of radiation, applications to health physics. (3 hours lecture per week.)

453. Nuclear Physics (3) (Offered in alternate years)

Prerequisites: Physics 222, Mathematics 250B. Properties of nuclei, radioactivity, elementary particles, nuclear reactions. Introductory discussion of theories of nuclear structure and nuclear processes. (3 hours lecture per week.)

Orange State College

454. Introduction to the Solid State of Matter (3) F

Prerequisite: One course in atomic or nuclear physics, differential equations. An introduction to the physical properties of matter in the solid state, as explained by atomic theory. Structural, mechanical, and growth properties of crystals; atomic bonding; electrical, magnetic, and thermal properties of metals, semiconductors, and insulators. (3 hours lecture per week.)

455. Introduction to Quantum Physics (3) S

Prerequisites: Physics 431, Physics 441, differential equations. An introduction to the concepts and theory of quantum physics. (3 hours lecture per week.)

471. Electronic Circuit Theory (3) (Offered in alternate years)

Prerequisites: Physics 222, Mathematics 250B. Operating characteristics of vacuum tubes, transistors, and semiconductor diodes. Linear circuit theory for alternating currents and for transient currents. Introduction to switching and pulse circuits. (3 hours lecture per week.)

481. Advanced Physics Laboratory (2) F

Prerequisite or corequisite: 1 course in nuclear or modern physics. Selected experiments in atomic and nuclear physics. (1 hour lecture and 6 hours laboratory per week.)

482. Advanced Physics Laboratory (2) S

Prerequisites: Physics 381, 382, and 481 or consent of department chairman. Selected experiments in classical and modern physics. (1 hour lecture, 6 hours laboratory per week.)

491. Senior Report (1) F, S

Prerequisite: Consent of department chairman. Selection and design for individual project, oral and written reports. (1 hour lecture-recitation per week.)

492. Senior Report (2) S

Prerequisite: Physics 491 and consent of department chairman. Laboratory work on individual project, oral and written progress reports, oral and written final report. (1 hour lecture-recitation and 6 hours laboratory per week.)

POLITICAL SCIENCE

IN THE DIVISION OF THE SOCIAL SCIENCES

100. American Government (3) F, S (Formerly 210)

Structure and functions of the United States Government; the federal system; the organization, powers and functions of the executive, legislative, and judicial branches; the relationship between federal, state and local units of government, the structure and functions of state and local government with special attention to California. This course satisfies the state requirements in U.S. Constitution and California state and local government.

101. Introduction to Politics and Government (3) F, S

An examination of political movements, their aims, strengths and ideologies. Contemporary issues at all levels of government; resultant patterns, with emphasis on their form in the United States and in California. This course satisfies the state requirement in U.S. Constitution.

306. Research Methods in Political Science (3) F

An introduction to the fundamentals of Political Science as a discipline. Areas of study, and appropriate concepts and methods of analysis. Distinctions between evaluation and description, law and politics, state and society. This course is intended for students who will be taking upper division Political Science.

311. State and Local Government (3) F, S

Development and role of state constitutions; the political, administrative and judicial systems of state, county, and city governments; relations of local governments to the state government, with special reference to California. This course satisfies the state requirement in California state and local government.

312. Political Parties and Pressure Groups (3) F (Formerly 412)

The American two-party system; party organization, nominating procedures, campaign methods; problems of party responsibility and party leadership. The power and growth of farm, labor, business, and non-economic pressure groups; interest-group activity in Congress, administration, and courts.

320. Introduction to Public Administration (3) F (Formerly 321)

Prerequisites: Political Science 100 and 311, or consent of the instructor. The nature and scope of public administration and its role in a democratic society; basic problems in the execution of public policies in the federal, state and local government units, such as organization, personnel, finance, internal management, administrative powers and responsibilities, intergovernmental relationships, and the impact on administration of public opinion.

331. Governments and Politics of Major Powers (3) F

Governmental structures, policies, and problems of major powers in Europe and Asia; constitutional characteristics; major political parties; election systems; federalist and unitarian features; comparative analysis.

340. Democracy and Communism (3) F

Recommended for non-majors. The democratic tradition, especially in the United States and Great Britain; the theory and practice of Communism in Soviet Russia, Yugoslavia, and Red China; authoritarian political thought in Italy, Germany, and Spain.

341. Fundamental Principles of Political Theory (3) F (Formerly 341A)

Problems of the relationship of man and morality in their relationship to the state; emphasis on the period from Plato to the Renaissance.

342. Specific Problems in Political Theory (3) S (Formerly 341B)

Problems of liberty and obligation, of forms of government and of the economy; emphasis on the period from the Renaissance to the present day.

351. International Relations (3) F, S

A study of the diplomatic, political, economic, and cultural relations of nations; the modern systems of nation states; basic factors of power; sovereignty, nationalism; imperialism; colonialism, the rise to influence of the developing nations; the peaceful settlement of disputes.

411. The Judicial Process (3) F

Prerequisite: Political Science 100 or consent of the instructor. The nature of the American judicial system; the courts in a federal system and their relationship to other branches of government. A study of the adversary process and the jury system. Judicial review and the political uses of the political process.

413. Constitutional Law (3) S

Prerequisite: Political Science 100 or consent of the instructor. Judicial decisions and precedents concerning the powers of government. Civil liberties, voting rights, war powers, business and labor regulation, apportionment and political parties.

414. The Legislative Process (3) S

Prerequisite: Political Science 100. The nature of the legislative process in the United States including the organization and procedures of legislative bodies, direct legislation and the relationships of the legislative branch to other branches of government. Comparative legislative systems will be analyzed.

415. Public Opinion and Political Behavior (3) F

Prerequisite: Political Science 100. The nature of public opinion in democratic and totalitarian societies; the manipulation of public opinion by interest groups, party organizations and government agencies. The relationship of propaganda to other forms of political power. The methods and uses of polls and opinion studies.

421. Government Finance Administration (3) F (Formerly 323)

Prerequisite: Political Science 320 or consent of the instructor. The role of finance administration and budgeting in the determination of public policy, and in the administrative planning and management of governmental operations. Examines the relationship of assessment administration to governmental revenues and expenditures, the principles and practices of cost accounting, treasury management, and capital budgeting.

422. Public Personnel Administration (3) S (Formerly 322)

Prerequisite: Political Science 320 or consent of the instructor. The growth and development of the civil service and the merit system; an evaluation of recruitment procedures and examinations; an analysis of such topics as position classification, salary structures, retirement plans, in-service training, employee organizations, and personnel supervision.

423. Urban Problems and Administration (3) S

Prerequisite: Political Science 320 or consent of the instructor. Administrative organization as a framework for decision-making and communication; the role of political power in the making of public policy; the element of human behavior in supervision and management; the practices and techniques of municipal and county management; and the impact of metropolitan growth on the activities of local government.

424. City and Regional Planning (3) F

Prerequisite: Political Science 320 or consent of the instructor. The origins and development of city and regional planning; the legal bases and fundamental concepts of planning are defined; and the organization and administration of the planning activity are examined. Attention is given to the major elements of the General Plan, zoning laws and administration, urban renewal, and capital programming.

426. Government Organization and Management (3) S

Prerequisite: Political Science 320 or consent of the instructor. An analytical examination of public administration organization, and the techniques and processes of public management; the growth and development of bureaucratic administration; the functions of administrative authority; and the importance of communication, coordination, and leadership to organizational action.

429. Government Internship (3-6) F, S

Prerequisite: Public Administration concentration and consent of the instructor. Supervised work experience in governmental agencies for the purpose of increasing student understanding of the nature and scope of governmental operations. Supervision is provided by the faculty and cooperating agencies. Student time required in an administrative assignment ranges from five to twenty hours per week, depending upon the number of credits sought and whether compensation is involved.

432. Government and Politics of Great Britain (3) S

Prerequisite: Political Science 331 or consent of the instructor. The history and dynamics of the British system; constitutionalism; society and the class structure; parties, public opinion and pressure groups; the formal and informal centers of power.

433. Government and Politics of Soviet Russia (3)

Prerequisite: Political Science 331 or consent of the instructor. The principles of Marxism-Leninism underlying the Soviet government, as modified by Stalin and Khrushchev; constitutional provisions and political practices; the Communist party and mass organization; elections and election campaigns; the press; education and religion; relation to the international Communist movement and the satellite governments.

434. Government and Politics of France (3) F

Prerequisite: Political Science 331 or consent of the instructor. Divisions in French society and their effect on the political institutions; traditions of authoritarianism and democracy, of stability and instability. Comparison of the basic features of the 5th French Republic with previous French constitutional structures; future possibilities.

435. Government and Politics of Germany (3) S

Prerequisite: Political Science 331 or consent of the instructor. A comparative study of basic features of German government and parties under the Empire, Weimar Republic, National Socialism, and the present Bonn Republic. The East-"German Democratic Republic" is studied as an example of a West European country under Communist rule.

440. Recent Political Thought (3) F

Prerequisite: Political Science 341 or 342 or consent of the instructor. A study of selected modern political thinkers.

442. American Political Thought (3) S

Prerequisite: Political Science 100. American political thought from the Colonial period to the present day including leaders such as Thomas Jefferson, Henry Clay, Abraham Lincoln, Woodrow Wilson, and Walter Lippmann.

452. American Diplomacy (3) F, S

Prerequisite: Political Science 351 or consent of the instructor. The formulation of American foreign policy and conduct of diplomacy; evaluation of both traditional and current practices, policies, and proposed major changes.

453. Foreign Policy Formulation (3) S

Prerequisite: Political Science 331 or 351 or consent of the instructor. A seminar type discussion of the formulation and implementation of the foreign policy of a selected country or countries with particular reference to the implementation of that policy in the United Nations, regional organizations or alliances. May be repeated for credit.

454. The Soviet Union in World Affairs (3) S

Prerequisite: Political Science 351, 433 or consent of the instructor. Theory and practice of Soviet Russia's foreign policies; the international relations theories of Marx, Lenin, Stalin, and Khrushchev; practices of the Kremlin; world strategy and tactics of the Soviet Communist movement.

460. International Law (3) S

Prerequisite: Political Science 351 or consent of the instructor. The sources and nature of international law; its role in a world of sovereign states; the law of war and peace; the rights and duties of nations in their international relationships. The World Court; purpose, problems, and prospects.

461. The United Nations and Other Public International Organizations (3) F

Prerequisite: Political Science 351 or consent of the instructor. The nature, scope, and role of public international organizations; evaluation of the League of Nations; analysis of the United Nations; its functions, purposes and problems; role of the World Court; International Labor Organization. Functions of UNESCO, UNICEF, and similar organizations.

499. Independent Study (1-3) F, S

Open to advanced students in Political Science by permission of the department. May be repeated for credit.

500. Independent Study and Research (1-3) F, S

Open to graduate students only by permission of the chairman of the department. May be repeated for credit.

501. Seminar in Political Science (3) S

Prerequisite: Consent of the instructor. Selected studies in political science with emphasis on individual research and contributions. May be repeated for credit.

511. Advanced Studies in American Politics (3) S

Prerequisite: Consent of the instructor. A comprehensive examination of the political process in the United States.

521. Seminar in Public Administration (3) S

Prerequisite: Consent of the instructor. Advanced study in the theory and practice of public administration. Attention will be given to selected problems in governmental administration, with emphasis on individual research and student contributions. May be repeated for credit.

551. Advanced International Relations (3) F

Prerequisite: Consent of the instructor. Study of selected problems in international relations with emphasis on individual research and contributions within the framework of a seminar. May be repeated for credit.

PSYCHOLOGY

IN THE DIVISION OF THE SOCIAL SCIENCES

101. Introductory Psychology (3) F, S (Formerly 201)

General introduction to basic concepts and problems in psychology as a behavioral discipline. Emphasis upon the human organism as an adapting system, with attention to genetic origins; normal development and capacities; problem-solving and adjustment to stress.

161. Elementary Statistics (3) F, S

An introductory course in descriptive statistics with an introduction to inferentive methods.

202. Principles of Psychology (3) S

Prerequisite: Psych. 101. A course for psychology majors covering selected basic areas of psychology in depth. Special emphasis on the methods of studying physiological factors, adaptive behavior, perception, cognition and motivation.

302. Experimental Psychology: Learning and Motivation (3) F

Prerequisites: Psych. 101, 202, 161 or permission of instructor. Experimental investigation in human and animal learning, memory, thinking, problem solving, and motivation with appropriate lecture and discussion. Two hour lecture and three hour laboratory.

303. Experimental Psychology: Sensation and Perception (3) S

Prerequisites: Psych. 101, 202, 161 or permission of instructor. Experimental methods as applied to sensation and perception. Two hour lecture and three hour laboratory.

311. Educational Psychology (3) F, S

Application of psychological research and theory to the educative process. Major attention given to the problems of learning, individual differences, child capacities, and behavior. (Not open to students who have taken Educ. 311.)

331. Psychology of Personality (3) F

Concepts of personality development, structure, and dynamics, with emphasis upon problems, methods, and findings in the study of personality.

341. Abnormal Psychology (3) F, S

Dynamics, symptoms, causes, treatment, and prevention of neuroses, psychoses, alcohol and drug addiction, psychosomatic illnesses, and character disorders. Field trips as arranged.

342. Mental Health (3) S

Social and emotional dynamics of the adjustment processes. Emphasis upon positive factors in the individual, group, and community conducive to improving mental health. (Credit not given as part of psychology major.)

351. Social Psychology (3) F

Study of phenomena of social interaction and the nature of group processes and influences. Attention paid to the intra-psychic effects of group influences. (Credit not given for both Psych. 351 and Soc. 341.)

391. Industrial Psychology (3) F

Study of psychological principles and techniques in industrial and business settings. Includes selection, placement, training, human factors, promotion, environmental influences, and problems of people at work.

407. Seminar in Basic Concepts of Philosophy and Psychology (4) F, S

Prerequisite: 3 units in both philosophy and psychology. An interdisciplinary study of significant interrelationships which obtain between basic concepts common to both philosophy and psychology.

408. History of Psychology (3) F, S

Prerequisites: 12 upper division units in psychology or permission of instructor. Survey of the development of psychology from early times to the present.

Orange State College

412. Psychology of Learning (3) S

Prerequisite: Psych. 302 or permission of instructor. Variables, processes, influences, factors, conditions, and elements of learning according to the major theoretical systems. Critical evaluation of the theories.

413. Perception (3) S

Prerequisite: Psych. 303 or permission of instructor. Psychological problems in perception. Emphasis on dynamic conception of the process of perception; relationship of perception to learning, cognition, and motivation.

421. Physiological Psychology (3) F

Survey of relations between behavior and biological processes. Anatomy and physiology of the nervous system, role of neural and humoral agents in perception and complex behavior (emotion, etc.), behavioral effects of brain lesions, the effects of drugs on behavior, psychosomatic disorders and motivation.

431. Theories of Personality (3) S

Prerequisite: Psych. 331 or permission of instructor. Personality structure, development, and dynamics according to major theories. Research methods as they apply to personality theory.

461. Group Psychological Testing (3) F, S

Prerequisite: Psych. 161 or equivalent. Intelligence, aptitude, interest, and personality testing. Theory, construction, evaluation, interpretation, and uses of psychological tests.

462. Individual Psychological Testing (3) S

Prerequisite: Psych. 461 and permission of instructor. Major tests of intelligence. Practice in administration, scoring, and interpretation of these instruments.

465. Advanced Psychological Statistics (3) S

Prerequisite: Psych. 161 or permission of instructor. Quantitative methods in psychology with particular emphasis on correlation, small sample theory, non parametrics and some complex analysis of variance procedures.

481. Survey of Clinical Psychology (3) F

Prerequisites: Psych. 341, 431, and 461. Development and contemporary aspects of the field. Methods, diagnosis, therapeutic techniques, research, and problems.

499. Independent Study (1-3) F, S

Prerequisites: Senior standing and permission of instructor. Individual library study or experimental investigation under direction of a staff member. May be repeated for credit.

500. Advanced General Psychology (3) F, S

An integration of key concepts in learning, motivation, perception, personality and social psychology.

510. Experimental Design (3) F, S

Prerequisites: Psych. 161 and 465. Principles and methods of planning and carrying out systematic investigations on the behavior of complex organisms, interdependence of experimental design and statistical evaluation of results, and the opportunity for practice in formulation of testable hypotheses.

QUANTITATIVE METHODS

IN THE DIVISION OF BUSINESS ADMINISTRATION AND ECONOMICS

(Offered by the Department of Marketing and Quantitative Methods)

361. Business and Economic Statistics (3) F, S

Prerequisite: Math 120 or equivalent. The collection, analysis and presentation of statistical data; theory of probability, sampling, experimental method, correlation, time series and index numbers, and their application to business and economic problems.

362. Introduction to Econometrics (3) F, S

Prerequisites: Quant. Meth. 361 (to have been taken or being taken concurrently) and Economics 200A,B. An introduction to basic mathematical tools and their application in economic analysis. The measurement and verification of economic relationships by statistical methods. Consideration of some econometric models.

364. Computer Logic and Programming (3) F

Prerequisite: College algebra or equivalent. An introduction to computer logic including elements of symbolic logic and number systems; programming methods and techniques.

461. Advanced Statistics (3) F

Prerequisites: Math. 150B or equivalent, Quant. Meth. 361. An advanced treatment of the theory and application of the topics covered in Quant. Meth. 361, using the methods of the calculus where appropriate.

462. Mathematical Models in Business and Economics (3) S

Prerequisites: Math. 120, Quant. Meth. 361, and Math. 150A, or Quant. Meth. 362, or equivalent. The construction and application of mathematical models to business decisions and economic analysis.

463. Statistical Decision Theory (3) S

Prerequisites: Math. 120 and Quant. Meth. 361. The analysis and application of advanced statistical techniques to the problems of management decision-making under conditions of uncertainty.

560. Operations Research (3) F, S

Prerequisites: Math. 150B, or equivalent, and Quant. Meth. 361, or consent of the instructor. An examination of the nature and scope of operations research, its methodology, and applications. Emphasis will be placed on model construction and models on inventory control, queuing, sequencing, scheduling, replacement, and mathematical programming.

RECREATION

IN THE DIVISION OF EDUCATION

(Offered by the Department of Health Education, Physical Education, and Recreation)

Rec 443. Theory of Recreation (2) F

Prerequisite: Consent of the instructor. Introduction to recreation principles; planning, organizing, administering, and evaluating recreation programs. Personal, social, and professional requirements of the recreational leader. (1 hour lecture, 2 hours activity.)

Orange State College

Rec 444. Recreation Programs and Activities (2) S

Prerequisite: Consent of the instructor. Theory and activity course, leadership in recreation programs, activities in recreation agencies. Laboratory experiences and practice included. (4 hours activity per week.)

RUSSIAN

IN THE DIVISION OF HUMANITIES

(Offered by the Department of Foreign Languages and Literatures)

101. Fundamental Russian (4) F

Listening-comprehension, speaking, reading-comprehension, and writing to develop control of the sounds and basic forms and structure of Russian. (3 hours lecture-discussion, 2 hours laboratory).

102. Fundamental Russian (4) S

Prerequisite: Russian 101 (or equivalent). Listening-comprehension, speaking, reading-comprehension, and writing to develop control of the basic forms and structure of Russian. (3 hours lecture-discussion, 2 hours laboratory).

203. Intermediate Russian (3) F

Prerequisite: Russian 102 (or equivalent). Intensive practice in speaking, understanding, reading, and writing based on cultural and literary materials. Linguistic analysis from sound to sentence. (3 hours lecture-discussion, 1 hour laboratory).

204. Intermediate Russian (3) S

Prerequisite: Russian 203 (or equivalent). Intensive practice in speaking, understanding, reading and writing based on cultural and literary materials. Linguistic analysis from sound to sentence. (3 hours lecture-discussion, 1 hour laboratory).

499. Independent Study (1-3) F, S (Formerly 480)

Supervised projects in Russian language or literature to be taken with the consent of the Department Chairman as a means of meeting special curricular problems. Selection of subject to be studied varies. May be repeated for credit.

SCHOOL SERVICES

IN THE DIVISION OF EDUCATION

351. Principles of Guidance (2) F, S

Prerequisite: Psych. 311 or Educ. 312. Guidance related to educational objectives and needs of youth. Special needs created by size and complexity of the modern educational system and modern society; general requirements, services, organization, and structure of a successful guidance program.

451. Principles of Educational Measurement (2) F, S

Prerequisite: Educ. 311 or Psych. 311. Development, validation, and application of the principles of educational measurement. Construction and use of informal and standardized achievement tests. Summary and interpretation of results of measurement.

452. Counseling Theories and Processes (3) F, S

Prerequisites: Psych. 342 or Educ. 351. Introduction to counseling. Dynamics of counselor and client, techniques and processes of various levels, and relation to personality theory. Major project required. Student seeking the credential to teach exceptional children will emphasize the counseling and guidance of the handicapped.

471. Exceptional Children (3) F, S

Prerequisites: Educ. 311 and Educ. 331, or Educ. 431, or Educ. 441. Study of children who deviate from the average in the elementary and the secondary schools; physically handicapped, mentally retarded, gifted, socially maladjusted, emotionally disturbed, and delinquent. Special educational services, curriculum, procedures, and materials necessary to promote their maximum development.

472. Gifted Children (2) F

Prerequisites: Educ. 311 and Educ. 331, or Educ. 431, or Educ. 441. Identification, principles of instruction, grouping, individualized instruction, classroom enrichment. Problem solving and research experiences in science, social studies, and mathematics, reading programs and literature, creative writing, oral language.

491. Audio-Visual Education (2) F, S

Prerequisites: Educ. 311, Educ. 441, or consent of the instructor. Media in communication, psychological bases, development, curricular function, evaluation. Survey of equipment and materials available, preparation of instructional materials for classroom use. Includes laboratory.

551. Educational and Career Orientation (3) F, S

Prerequisite: Educ. 452 or permission of instructor. Principles of evaluating, classifying, and disseminating occupational and educational information in the guidance program; sources of occupational literature, occupational research, vocational surveys, and individual assessment for potential occupational choice. Emphasis on the psychological and sociological implications of career and educational choice.

552. Group Processes in Guidance (3) F

Prerequisite: Educ. 452 or permission of instructor. Intensive study of dynamics of group process, leadership, role playing, sociometric techniques, and group counseling.

553. Administration and Organization of Pupil-Personnel Programs (3) S

Prerequisites: Educ. 452, Educ. 551 or permission of instructor. Development, organization, and administration of the pupil-personnel services. Analysis and evaluation of pupil personnel services by the case study method, curriculum, counselor competencies, staffing.

554. Laws Relating to Child Welfare (2) S

Prerequisite: Educ. 452 or permission of instructor. Study of state, federal, and local laws affecting the child. Educational and statutory regulations will be covered in detail.

555. Individual Diagnosis (3) S

Prerequisites: Educ. 451 and Educ. 452. Intensive study of the techniques of individual diagnosis including the synthesis and interpretation of information. Case study and case conference approach to diagnosis.

559A,B. Field Work in Counseling (3-3) F, S

Prerequisite: Educ. 551, Educ. 555 and permission of instructor. Guidance and counseling in the school setting under the supervision of local coordinator and college staff. Work assignments vary for school counselors, psychometrists, and child welfare workers. Work in a counseling relationship, parent conferences, and follow-up studies.

561. The Government of Schools in the U.S. (2) F

Prerequisite: Educ. 503. Meets credential requirements in federal, state and county school administration. Structure, functions, trends and issues at each level. Emphasis on intergovernmental relations and impact at local level.

561a. Organization of School Systems (3) S

Prerequisite: Educ. 503. Structure, functions, trends, fiscal responsibilities and issues in respect to the government of education at federal, state, county and local district levels. Emphasis on intergovernmental relations and impact at local level.

563. Principles of School Personnel (2) F, S

Prerequisite: Educ. 503. Principles of organizational behavior, social processes inherent in effective leadership, and techniques of school personnel management.

566e. Organization and Administration of Elementary Schools (3) F, S

Prerequisites: Educ. 503, 505, 511, 561, 563. May be taken concurrently with Educ. 569e. Leadership role of elementary school principal, pupil personnel and instructional program in the elementary school; working relations and morale among staff, community and pupils; parent education; relations with central district staff; management and record keeping functions; teacher evaluation. Meets credential requirement.

566s. Organization and Administration of Secondary Schools (3) F

Prerequisites: Educ. 503, 505, 511, 561, 563. May be taken concurrently with Educ. 569s. Leadership role of secondary school principal, pupil personnel and instructional program in the secondary school; the development and administration of vocational and adult education; working relations and morale among staff, community and pupils; relations with central district staff, the management and record keeping functions; teacher evaluation. Meets credential requirement.

569e. Directed Field Work in Elementary School Administration and Supervision (2) F, S

Prerequisites: Educ. 566e or concurrent registration. Work in selected elementary schools and district offices. Further details in special publications. Meets credential requirement.

569s. Directed Field Work in Secondary School Administration and Supervision (2) F

Prerequisites: Educ. 566s or concurrent registration. Work in selected secondary schools and district offices. Further details in special publication. Meets credential requirement.

SCIENCE EDUCATION

IN THE DIVISION OF SCIENCE AND MATHEMATICS

(Offered by the Department of Science and Mathematics Education)

432. Teaching Science in the Elementary School (2) F, S

A series of lecture discussion-demonstration periods will begin the course. These meetings will be supplemented by reading assignments, films, and exhibits appropriate to the subject under consideration. Students will be given ample opportunity to develop materials and techniques for science teaching. After a foundation in philosophy, objectives, methods, content, materials, and evaluation techniques appropriate for elementary science has been established, the students will develop and present short teaching units before the class. These presentations will follow a scope and sequence pattern similar to that developed in the state-adopted textbooks. (One 2½ hour meeting per week plus 1 hour laboratory period per week by arrangement.)

442. Teaching Science in the Secondary School (2-3) F, S

Various areas of investigation have been selected to offer the student a maximum of value in organizing his own course in the secondary science field. These areas of concentration include: an introduction into the philosophical, psychological, social, and historical backgrounds of science education; an investigation of the objectives, methods, and techniques of science teaching; practice in formulating ideas and information into a teaching plan; experience in using the equipment available in the science class, and conducting short laboratory exercises before the group. See Education listing for professional prerequisites. (One 3½ hour meeting per week plus 1 hour laboratory period per week by arrangement.)

SECONDARY EDUCATION

IN THE DIVISION OF EDUCATION

300. Practicum in Secondary Education (1) F, S (Formerly 340A,B)

Required first course in the professional sequence for the Standard Teaching Credential with Specialization in Secondary School Teaching. Two hours observation per week in selected junior and senior high school classes and one hour per week in campus discussion groups. Includes application for admission to teacher education.

441. Principles and Curricula of Secondary Education (2) F, S

Prerequisites: Educ. 311, admission to teacher education, or consent of the instructor. Principles and philosophy of secondary education in the United States: organization, curriculum, evaluation, and teaching practices including audio-visual methods and materials. Correlated with methods and materials courses in the majors. Required of all candidates for the General Secondary Credential.

442. Teaching—in the Secondary School

A series of courses, listed dually in the Division of Education and in the other appropriate divisions, dealing with objectives, methods, and materials of teaching the various subjects and areas in secondary schools. Required, before student teaching, of students presenting majors in these areas or subjects for the General Secondary Credential or the Standard Teaching Credential with Specialization in Secondary School Teaching. Students without teaching experience register for three units credit, and must allow sufficient time in their schedules, at the same hour each day, so that they can serve as teacher aides in high schools.

Prerequisites: 20 units in the major, Education 300, Education 311, and senior standing; or consent of the instructor.

Art Ed. 442. Teaching Art in the Secondary School (2-3) F

Bus. Ed. 442. Teaching Business in the Secondary School (2-3) F

Engl. Ed. 442. Teaching English in the Secondary School (2-3) F, S

For. Lang. Ed. 442. Teaching Foreign Languages in the Secondary School (2-3) F

Journ. Ed. 442. Teaching Journalism in the Secondary School (2-3) S

Math. Ed. 442. Teaching Mathematics in the Secondary School (2-3) S

Mus. Ed. 442. Teaching Vocal Music in the Public Schools (2-3) S
(Replaces Mus. Ed. 442b)

Mus. Ed. 443. Teaching Instrumental Music in the Public Schools (2-3) S
(Replaces Mus. Ed. 442a)

P.E. 442. Teaching Physical Education in the Secondary School (2-3) F

Sci. Ed. 442. Teaching Science in the Secondary School (2-3) F, S

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Soc. Sci. Ed. 442. Teaching Social Sciences in the Secondary School (2-3) F, S

Speech Ed. 442. Teaching Speech in the Secondary School (2-3) F

443. Principles of Core Curriculum (2) S (Offered in alternate years)

Prerequisites: Teaching experience or consent of the instructor. Unity and inter-relationships of human learning and behavior and the curricular processes and arrangements by which this may be achieved. Development, principles, and application of core curricula; guidance functions; evaluation; and roles of the teacher.

547. Seminar for Secondary Education (3) F (Offered in alternate years)

Prerequisite: Educ. 549 or consent of the instructor. Persistent problems in secondary education and survey of related literature; causes of and solutions for these problems. Application of scientific method to educational problems, sources of educational research, and to techniques of cooperative thinking.

549. Student Teaching in the Secondary School (8) F, S

Prerequisites: Educ. 442, admission to student teaching. Student teaching for the General Secondary Credential or the Standard Teaching Credential with Specialization in Secondary School Teaching. Participation in a regular secondary school teaching program for half days for a full semester or full days for a half semester. Includes a seminar each week in problems and procedures of secondary school teaching, under the direction of the respective college supervisor. Beginning with the fall semester, 1965, students with majors in Art will divide their student teaching between two semesters, and will register for 3 units credit each semester. Unit credit for all students enrolled in Educ. 549 will be reduced from 8 to 6 in the fall of 1965.

SOCIAL SCIENCES EDUCATION IN THE DIVISION OF SOCIAL SCIENCES

432. Teaching Social Sciences in the Elementary School (2) F, S

Prerequisites: Educ. 311, admission to teacher education. Principles, methods and materials of teaching the social studies in the elementary school.

442. Teaching Social Sciences in the Secondary School (2-3) F, S

Prerequisite to student teaching in social studies. Objectives, methods, materials, curriculum in social studies in secondary schools. Includes consideration of new trends and new interpretations in the social sciences; development, present status, problems, and trends in the secondary school social studies curriculum; and professional growth of the social studies teacher. See listing under Division of Education for details.

SOCIAL WELFARE IN THE DIVISION OF THE SOCIAL SCIENCES (Offered by the Department of Sociology)

311. Welfare Institutions (3) F

Prerequisite: Consent of the instructor. An introduction to the field, taught by an experienced social worker. Consideration of the philosophy, structure, functioning, and coordination of welfare agencies. Designed for students interested in social work and such related professions as teaching, counseling, public administration, law, medicine, and religious vocations.

SOCIOLOGY

IN THE DIVISION OF THE SOCIAL SCIENCES

201. Introduction to Sociology (3) F, S

A general introduction to the basic concepts of sociology, and the scientific study of human society. Among topics included are social interaction, culture, personality, social processes, population, social class, the community, social institutions, and socio-cultural change.

202. Social Problems (3) F, S

Prerequisite: Sociology 201. Study of the extent, causes and consequences of a number of social problems, with emphasis on Twentieth Century America. Problems are viewed in the context of society as a whole.

271. Education for Marriage (3) S

A socio-psychological study of marital adjustment. Dating and mate selection; factors associated with successful marriages; principal areas of adjustment; parent-child relationships; causes and results of divorce; the family of tomorrow.

331A. Social Research Methods (3) F (Formerly 492)

Prerequisite: Sociology 201 or consent of the Department. Research design and methods of gathering data, especially by interview and questionnaire, are emphasized. Among other topics are the role of theory in research, and sampling methods and problems.

331B. Social Research Methods (3) S

Prerequisites: Sociology 201, 331A, or consent of the Department. Elementary statistical analysis of social data is emphasized, with some consideration of problems of measurement and of the writing of research reports.

341. Social Interaction (3) F

Prerequisites: Sociology 201 and 3 units of psychology. Inquiry into the social and socio-psychological dimensions of group behavior and the socialization of the individual. Social interaction and its impact on the individual and personality formation. Credit can be given for this course or Psychology 351, *but not both*.

348. Collective Behavior (3) S

Prerequisite: Sociology 201. Characteristics of crowds, mobs, publics, social movements and revolutions; their relation to social unrest and their role in developing and changing social organization.

361. Population Problems (3) F

Prerequisite: Sociology 201. Population composition, growth and movement. Social factors affecting birth rates, death rates, and migration. Attention is given to the population of the United States and to selected areas of the world.

371. Urban Sociology (3) S

Prerequisite: Sociology 201. The population and ecology, patterns of growth, institutions, characteristic social interaction, values, and problems of the urban community.

411. Criminology (3) S

Prerequisite: Sociology 201. The extent, causes and control of crime and delinquency. Includes study of the criminal law, causal factors and theories, correctional institutions, probation and parole, and preventive efforts.

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431. Minority Group Relations (3) F

Prerequisite: Sociology 201. Study of racial, national and religious minorities, especially in the United States. Includes study of discrimination, prejudice, different patterns of inter-group adjustment, and attempts to change group status.

436. Social Stratification (3) S

Prerequisite: Sociology 201. Social class structures and their functions. Different styles of life; determinants of class status; vertical social mobility; change in class systems.

451. Sociology of the Family (3) F, S

Prerequisite: Sociology 201. The family as a social institution. Historical and cross-cultural perspectives; social change affecting marriage and the family; analysis of American courtship and marriage patterns; the psychodynamics of family life.

465. Law and Society (3) F

Prerequisite: Sociology 201. The law and lawyers in the context of human society. Law as formal social control, variations in legal systems, social change and selected areas of law, the legal profession.

470. Sociology of Occupations (3) F

Prerequisite: Sociology 201. Sociological analysis of work roles in technologically advanced societies. Career patterns, occupational recruitment, job mobility, organizational demands. The nature and development of the professions, their ideologies and images.

473. Complex Organizations (3) S

Prerequisite: Sociology 201. Sociological analysis of formal organizations (industrial, governmental, welfare, military, medical, educational, correctional, etc.) as systems of social interaction. Includes such topics as blueprinted vs. informal structure, authority, decision-making, role conflicts, communication and morale.

477. Social Organization (3) F

Prerequisite: Sociology 201. Theories of social organization and the structure of various social groups are analyzed, with a comparative analysis of social structures and systems. The various levels of groups are discussed and interrelated.

480. Development of Social Thought (3) F

Prerequisite: Sociology 201. Social thought and civilization since early times; comparative study of the orientations of earlier writers towards the nature of man and society.

481. Contemporary Sociological Theory (3) S

Prerequisite: Sociology 201 and consent of the Department. The main schools of sociological thought, both European and American, with emphasis on systematic theory, methodology of theorists, cultural change, and social institutions.

499. Independent Study (1-3) F, S

Prerequisites: At least 12 hours of Sociology and consent of the adviser. Student selects an individual research project, either library or field. There are conferences with the adviser as necessary, and the work culminates in one or more papers. May be repeated for credit.

500. Independent Study and Research (1-3) F, S

Prerequisite: Consent of the graduate adviser, and the Department. Individual research on either a library or empirical project, with conferences with the adviser as necessary, culminating in one or more papers. May be repeated for credit.

541. Seminar in Social Interaction (3) S

Prerequisites: Sociology 341 or consent of the Department. Advanced social-psychological study of social interaction, including sociological factors in personality development and analysis of primary group behavior.

561. Seminar in Social Change (3) F

Prerequisite: Consent of the Department. Patterns and processes of social change, with opportunities for application to selected aspects of both advanced and newly developing societies.

SPANISH

IN THE DIVISION OF HUMANITIES

(Offered by the Department of Foreign Languages and Literatures)

101. Fundamental Spanish (4) F

Listening-comprehension, speaking, reading-comprehension, and writing to develop control of the sounds and the basic forms and structure of Spanish. (3 hours lecture-discussion, 2 hours laboratory.)

102. Fundamental Spanish (4) S

Prerequisite: Spanish 101 (or equivalent). Listening-comprehension, speaking, reading-comprehension, and writing to develop control of the basic forms and structure of Spanish. (3 hours lecture-discussion, 2 hours laboratory.)

203. Intermediate Spanish (3) F

Prerequisite: Spanish 102 (or equivalent). Intensive practice in speaking, understanding, reading and writing based on cultural and literary materials. Linguistic analysis from sound to sentence. (3 hours lecture-discussion, 1 hour laboratory.)

204. Intermediate Spanish (3) S

Prerequisite: Spanish 203 (or equivalent). Intensive practice in speaking, understanding, reading, and writing based on cultural and literary materials. Linguistic analysis from sound to sentence. (3 hours lecture-discussion, 1 hour laboratory.)

315. Introduction to Spanish Culture and Literature (3) F

Reading and discussion to develop insights into Spanish literature and culture while strengthening facility with the language. Open to lower division students with the consent of the instructor. Conducted in Spanish.

316. Introduction to Latin-American Literature (3) S

Reading and discussion to develop insights into Latin-American literature and culture while strengthening facility with the language. Open to lower division students with the consent of the instructor. Conducted in Spanish.

317. Advanced Conversation and Composition (3) S

Designed to give the student special competence in the control of Spanish as an instrument for free oral and written expression. Open to lower division students with the consent of the instructor. Conducted in Spanish.

351. The Golden Age (3) F

The works of the major writers, including the Picaresque Novel, Lope de Vega, Tirso and Calderon. Conducted in Spanish.

361. Latin American Literature (3) S

The novel, essay and poetry from 1800 to the present. Conducted in Spanish.

400. Spanish for Teachers (3) F, S

Intensive review of spoken Spanish, using recent developments in methodology and texts as subject material.

451. Spanish Literature to the Golden Age (3) F

Cantar de Mio Cid and other epic poetry, the prose of Juan Manuel, the Renaissance lyrics of Garcilaso de la Vega, and *La Celestina*. Conducted in Spanish.

461. Spanish Literature Since Neoclassicism (3) S

Representative works of the 19th and 20th centuries. Analysis of Romanticism, Eclecticism, Naturalism, Realism, and "Tremendismo." Conducted in Spanish.

466. Applied Linguistics in the Teaching of Spanish (3) F
(Formerly Foreign Languages Education 455)

Introduction to general linguistics with emphasis on the relation of speech and writing, the theory and practice of pronunciation, and the phonemic and morpho-phonemic structure of the language under study. (Same as French, German 466)

471. Senior Seminar: Literature of the Nineteenth Century in Spain (3) F

The literary currents and foreign influences on Spanish literature. Analysis of Romanticism, Eclecticism, Realism, and Naturalism. Conducted in Spanish.

475. Senior Seminar: Contemporary Literature of Spain (3) F

The Generation of '98, the theatre of Benavente and Lorca, modernista and post-modernista poetry, and the "tremendista" novel. Conducted in Spanish.

499. Independent Study (1-3) F, S (Formerly 480)

Supervised projects in Spanish language or literature to be taken with the consent of the Department Chairman as a means of meeting special curricular problems. Selection of subjects to be studied varies. May be repeated for credit.

557. Graduate Seminar: Latin American Poetry (3) F

The *modernismo* movement. Conducted in Spanish.

567. Graduate Seminar: The Latin American Novel (3) S

Naturalism, Regionalism, and the novel of the Mexican Revolution. Conducted in Spanish.

SPEECH

IN THE DIVISION OF FINE AND APPLIED ARTS

101. Fundamentals of Speech (3) F, S

This course is designed to give the student training in the basic principles of oral communication. Discussion, oral reading, and public speaking projects are used to approach these goals: the improvement of personal speech habits, the development of cooperative deliberation, the ability to listen with improved understanding and discrimination, and the development of some proficiency in the organization and presentation of ideas.

138A,B. Forensics (2,2) F, S,

Investigation and practice in the background, format, procedures, and evaluation criteria of the various forensic events. Students must participate in at least two intercollegiate tournaments.

202. Voice and Diction (2) F, S (Formerly 302)

The study of the principles and practice of correct sound formation, voice production, and manner of speaking.

208. Speech Improvement Laboratory (1) F, S (Formerly 308)

Prerequisite: Concurrent registration in Speech 202. This course provides for individual help on speech problems; provides for training in articulation and voice control.

211. Introduction to Oral Interpretation (3) F, S

Same as Drama 211.

231A,B. Essentials of Public Speaking (3,3) F, S (231A Formerly 331)

Prerequisite: Speech 101, a high school speech course, or consent of instructor.

The composition and delivery of talks to inform and to persuade. Investigation of the principles and theory of presentation in various types of speech situations. Second semester emphasizes argumentation.

301. Speech for Teachers (3) F, S

Four general areas of speech which relate directly with teaching proficiency are examined: the speech of the teacher, the speech and hearing problems of children, the use of speech as a teaching device, and the speech of the teacher in public and group situations.

311. Oral Interpretation (3) F, S

Same as Drama 311.

333. Business and Professional Speaking (3) F, S

Prerequisite: Speech 231A or equivalent, organization responsibilities, or consent of instructor. Particular attention is given to the interview, speeches for special occasions, information giving, and business conferences.

334. Advanced Public Speaking (3) F

Prerequisite: Speech 231A or equivalent. Investigation of modern rhetorical theory as applied to platform speaking. Particular attention to the use of various techniques under specific circumstances.

335. Argumentation and Debate (3) S

Argumentation as applied to formal speaking and debate. Special attention is given to logic and evidence as related to analysis of significant questions for debate; case structure, and refutation.

338A,B. Forensic Workshop (2,2) F, S

Directed activity in debate and other forensic events. Participation in intercollegiate competition is required for credit. (May be repeated for a total of eight units.)

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341. Phonetics (3) F

The study of the history and theory of speech sounds based on the use of the International Phonetic Alphabet and the various factors influencing articulation and pronunciation.

351. Speech Science (3) S

Anatomy and physiology of the speech and hearing mechanisms.

403. Speech Development (3) F

Study of the normal speech and language development; psychological aspects of speech and language of the individual.

404. General Semantics (2) S

An examination of the basic principles underlying the influence of language on human action and interaction.

424. Discussion and Group Leadership (3) F, S

The principles and practices of small groups in discussion with special emphasis on committee work, sensitivity training, problem solving and preparation for group consideration of ideas in education, business, and community.

434. American Public Address (3) S

Prerequisite: Six units of upper division speech. A rhetorical history of the United States from the colonial period to the present. The influence of selected speeches and speakers on the development of American culture.

436. Survey of Rhetoric (3) F

Prerequisite: Six units of upper division speech. A survey of ancient, medieval and modern rhetoric.

441. Introduction to Speech Correction (3) F, S

Prerequisite: Speech 341. Speech correction with special emphasis on the identification of the most commonly experienced speech problems; basic principles of therapy in the clinic and in the classroom; importance of referral, parent conferences, mental health, etc.

443. Advanced Speech Correction (3) F, S

Prerequisite: Speech 441 or equivalent. Etiologies, diagnosis, and remedial procedures of speech defects and voice problems, both functional and organic, and certain major disorders including stuttering, cleft palate, cerebral palsy, aphasia, and tongue thrust.

444. Persuasion (3) S

Prerequisite: Six units of upper division speech. The study and application of psychological principles used by writers and speakers to effect social control: audience analysis and the use of persuasive techniques to influence the thought and behavior; the function of ethos.

451. Diagnostic Methods in Speech and Hearing (3) S

Prerequisite: Speech 443 or concurrent registration in Speech 443 or consent of instructor. Provides the student with information about various diagnostic procedures that can be used by him and in consultation with members of related disciplines: psychologist, pediatrician, otologist, orthodontist, neurologist.

452. Methods in Speech Correction (3) F

Prerequisite: Speech 443 or concurrent registration in Speech 443 or consent of instructor. Observation and supervised experience in recommended procedures and use of instructional aids with speech-handicapped children, including the preparation and utilization of speech correction and speech improvement materials.

458. Clinical Practice (2) F, S

Prerequisite: Speech 451 or 452 or concurrent registration in one of the courses, and approved application for clinical practice. Practice in the correction of the speech in children and adults under supervision. May be repeated for a total of 6 units.

461. Audiometry and Aural Rehabilitation (3) F

Prerequisite: Speech 351 or consent of instructor. Equipment, principles, methods, and procedures used in establishing and conducting school hearing conservation programs. Attention is given to techniques of audiometric testing and use of audiograms, principles, and methods of hearing conservation; psychology of the acoustically handicapped child; relationship between speech and hearing; hearing aids and their use; care and use of group puretone audiometers. Meets the state requirement for public school audiometrist.

462. Speech Reading (2) S

Prerequisite: Speech 341 or consent of instructor. Historical backgrounds of lip reading, methods used in visual reading of speech, and the techniques commonly used in the teaching of speech reading to the aurally handicapped.

463. Audiology (3) S

Prerequisite: Speech 461. Diagnostic and predictive tests of auditory functioning; types and characteristics of hearing aids; clinical practice.

490. Senior Seminar (1) F, S

Research and research methods in speech.

499. Independent Study (1-3) F, S

Open to advanced students in Speech with the consent of the department chairman. May be repeated for credit.

557A-G. Seminar in Speech Problems (2) F, S

May be repeated for a total of 14 units, but no individual seminar may be repeated for credit: A. Cleft Palate, B. Stuttering, C. Aphasia, D. Cerebral Palsy, E. Aphasoid Child, F. Voice Disorders, G. Articulation Problems.

SPEECH EDUCATION

IN THE DIVISION OF FINE AND APPLIED ARTS

(Offered by the Department of Speech)

442. Teaching Speech in the Secondary School (2-3) F

Prerequisites: Education 311, Education 300, senior standing, or consent of the instructor. Objectives, methods, and materials for teaching speech in secondary schools. Required, before student teaching, of students presenting majors in speech for the General Secondary Credential. Students without teaching experience must register for three units credit, and must allow sufficient time in their schedules, at the same hour each day, so that they can serve as teacher aides in high schools.

459. Clinical Practice and Student Teaching in Speech Correction and Lip Reading (4) F, S

Prerequisites: Education 311 and 24 units in the area of speech and hearing therapy. Provides the student with the necessary skills and knowledges to work with speech and hearing handicapped children in the public schools. Experiences include working in small groups and in individual therapy sessions with speech and hearing handicapped children enrolled in regular school classes, participation in parent counseling conferences and conferences with school personnel including administrators, classroom teachers, and nurses. Planning of curriculum materials to integrate speech and hearing therapy with regular classroom instruction will be stressed. This meets the directed teaching requirement for the credential to teach speech and hearing handicapped in remedial classes.

FACULTY AND ADMINISTRATION

1963-64

(Year in parenthesis indicates date of appointment)

- LANGSDORF, WILLIAM B. (1959), President and Professor of History
B.A., M.A., Occidental College; Ph.D., University of California
- ADAMS, PHILLIP A. (1963), Assistant Professor of Biology
B.S., University of California; M.A., Ph.D., Harvard University
- ADAMS, RAYMOND V. (1960), Professor of Physics and Chairman, Physics Department
B.S., Kansas State University; Ph.D., California Institute of Technology
- AHUMADA, RODOLFO (1963), Assistant Professor of Philosophy
B.A., M.A., Mexico City College; Ph.D., University of Southern California
- ALAMSHAH, WILLIAM H. (1959), Professor of Philosophy and Chairman, Philosophy Department
M.A., Claremont Graduate School; Ph.D., University of Southern California
- *ALEXANDER, JAMES P. (1960), Assistant Professor of Journalism
B.A., M.S., University of Southern California
- ALLEN, HOLLIS P. (1960), Professor of Education and Coordinator of Graduate Studies
B.A., Pomona College; M.A., Ed.D., Stanford University; LL.D., Claremont Graduate School
- AMES, DENNIS B. (1960), Professor of Mathematics and Chairman, Mathematics Department
B.A., M.A., Bishop's University; Ph.D., Yale University
- ASHLEY, THOMAS J. (1961), Assistant Professor of Political Science
B.A., Fresno State College; Ph.D., Claremont Graduate School
- AUSTIN, DON D. (1963), Assistant Professor of English
B.A., M.A., University of Redlands; Ph.D., University of Washington
- BACON, JUNE (1962), Librarian II
B.A., University of California; M.S. in L.S., University of Southern California
- BARRES, STEPHEN J. (1961), Associate Professor of Labor Relations and Management and
*Chairman, Management Department
B.A., Texas Western College; M.S., Ph.D., Purdue University
- BARRETT, JEAN A. (1963), Assistant Professor of Physical Education
B.S. Cortland State Teachers; Ed.M., University of Buffalo
- BECK, WARREN A. (1961), Associate Professor of History
B.A., M.A., Wayne University; Ph.D., Ohio State University
- BECKER, ERNEST A. (1959), Dean of Students and Associate Professor of Philosophy
B.A., Amherst College; B.D., Hartford Theological Seminary; M.A., Ed.D., University of Southern California
- BENGTSON, KURT L. (1963), Lecturer of Physics
B.S., M.A., Wayne State University
- BIESIOT, PETER G. (1963), Assistant Professor of Management
B.A., University of Washington; M.B.A., Cornell University; M.S., University of Nebraska
- BLANCHARD, MILTON C. (1961), Building Coordinator
B.S., M.Ed., Tufts University
- BLEND, HARVEY (1963), Professor of Physics
B.S., University of Texas; M.S., Ph.D., University of California, Los Angeles
- BRATTSTROM, BAYARD H. (1960), Associate Professor of Zoology
B.S., San Diego State College; M.A., Ph.D., University of California, Los Angeles
- BREINHOLT, VERNA A. (1961), Associate Professor of Speech
B.A., M.A., Brigham Young University
- BRICKEY, MARY L. (1963), Librarian I
B.A., M.S. in L.S., University of Illinois
- BRIDGMAN, DONALD C. (1960), Professor of Education
B.A., Chapman College; M.S., Ed.D., University of Southern California
- BRISTOW, RONALD M. (1959), Associate Dean of Students, Activities, and Instructor in Education
B.A., M.S., University of Southern California
- BROCKMANN, LOUIS O. (1963), Professor of Education, and Acting Chairman, School Services Department
B.A., M.A., Ph.D., University of Wisconsin

* On leave 1963-64

Orange State College

- BROWN, EDWARD D. (1963), Assistant Professor of Drama
B.A., Louisiana State University; M.A., Michigan State University; Ph.D., University of Denver
- BROWN, GILES T. (1960), Professor of History and Chairman, Division of Social Sciences, and Chairman, History Department
B.A., San Diego State College; M.A., University of California; Ph.D., Claremont Graduate School
- BRUNELLE, EUGENE A. (1962), Assistant Professor of English
B.A., Harvard College; M.S., Simmons College; M.A., University of California
- BYRDEN, JOHN H. (1961), Professor of Chemistry and Chairman, Chemistry Department
B.S., College of Idaho; M.S., California Institute of Technology; Ph.D., University of California, Los Angeles
- BURKE, MAX W. (1960), Director of Placement Services and Assistant Professor of Education
B.A., University of Iowa; B.D., Colgate-Rochester Divinity School
- BURNS, CAROL N. (1963), Registrar
B.A., Fresno State College
- CALHOUN, ROLAND L. (1961), Assistant Professor of Psychology
B.A., Claremont Men's College; M.A., Ph.D., University of Michigan
- CARLSON, RAE S. (1961), Assistant Professor of Psychology
B.A., University of Nebraska; M.S., University of Washington; Ph.D., University of Michigan
- CARR, EDWIN R. (1960), Professor of Education and Economics and Coordinator of Secondary Education and Chairman, Secondary Education Department
B.A., Jamestown College; M.A., Columbia University; Ph.D., University of Minnesota
- CHEN, WILLIAM P. (1960), Librarian IV
B.A., National Wu-han University, China; M.S. in L.S., M.A., Ph.D., University of Illinois
- COOK, BEVERLY B. (1962), Assistant Professor of Political Science
B.A., Wellesley College; M.A., University of Wisconsin; Ph.D., Claremont Graduate School.
- CROY, HAZEL M. (1960), Associate Professor of Education
B.A., M.A., University of Redlands; Ed.D., University of California, Los Angeles
- CUMMINGS, SHERWOOD P. (1963), Associate Professor of English
B.S., University of Illinois; M.A., Ph.D., University of Wisconsin
- CUSICK, JAMES W. (1961), Assistant Professor of Education
B.S., Montana State College; M.A., Washington State University
- DAVIS, BARBARA E. (1960), Librarian III
B.S., Carnegie Institute of Technology; B.Mus., University of Wisconsin; M. in L.S., Carnegie Library School
- DAVIS, F. JAMES (1962), Professor of Sociology and Chairman, Sociology Department
B.A., Ph.D., State University of Iowa
- de GRAAF, LAWRENCE B. (1959), Assistant Professor of History
B.A., Occidental College; M.A., Ph.D., University of California, Los Angeles
- DENNO, RAYMOND E. (1961), Audio-Visual Coordinator and Professor of Education
B.A., University of California, Santa Barbara; M.S., University of Southern California; Ed.D., University of California, Los Angeles
- DIETZ, NAOMI G. (1960), Associate Professor of Art
B.S., Whitworth College; M.A., Teachers College, Columbia University
- DOANE, KENNETH R. (1960), Professor of Education and Chairman, Division of Education and Chairman, Foundations of Education Department
B.S., Wisconsin State College, La Crosse; M.S., Ph.D., University of Wisconsin
- DONNELL, ROBERT M. (1962), Librarian II
B.S., Arizona State University; M.A., University of Denver
- DONOGHUE, MILDRED R. (1962), Assistant Professor of Education
B.A., University of Michigan; M.A., University of Detroit; Ed.D., University of California, Los Angeles
- EARICK, ARTHUR D. (1960), Associate Professor of Geography and Chairman, Geography Department
B.A., Indiana University; M.A., Ph.D., University of Michigan
- EHMANN, GERHARD E. (1959), Dean of Educational Services and Summer Session and Professor of Education
B.A., Occidental College; M.A., Ed.D., University of California, Los Angeles
- ELLERY, LAWRENCE F. (1963), Assistant Professor of Management
B.A., Oberlin College; M.S., University of Illinois
- ETUE, GEORGE E., (1963), Assistant Professor of History
B.A., Union College; M.A., Ph.D., University of California
- EVJENTH, HENRY A. (1964), Instructor of Art
B.A., M.A., Long Beach State College
- FESSENDEN, SETH A. (1959), Professor of Speech and Chairman, Speech and Drama Department
B.S., M.S., University of Illinois; Ph.D., New York University

- FIERMAN, MORTON C. (1963), Associate Professor of Education
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